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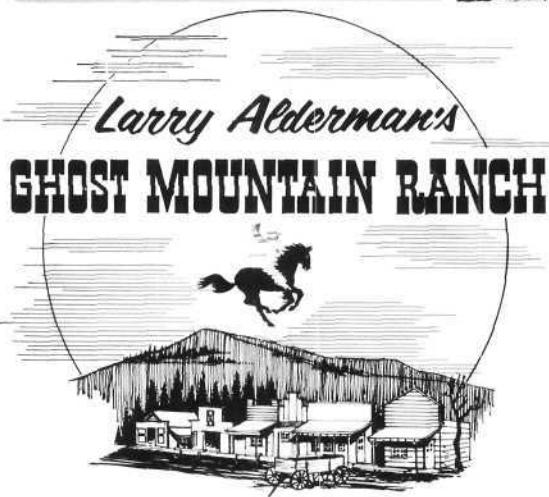


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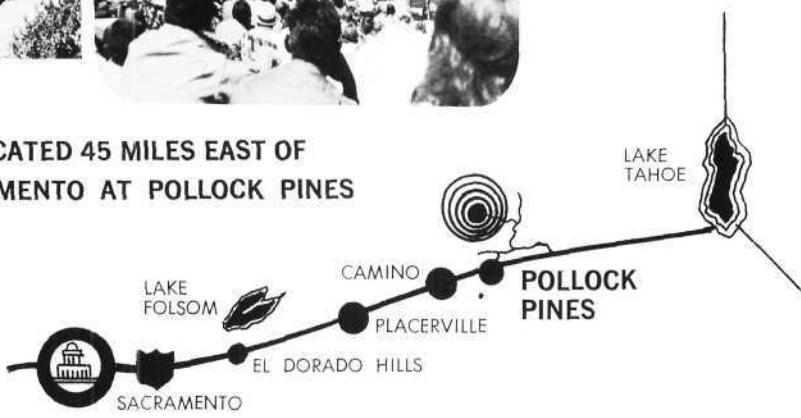
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LOST LEGENDS OF THE WEST by Brad Williams and Choral Pepper. The authors examine the "lore, legends, characters and myths that grew out of the Old West" in a sequel to their popular first book, *The Mysterious West*. Included among the more than 20 "lost legends" are such intriguing subjects as lost bones, lost ladies, lost towns, and lost diamonds. Hardcover, illustrated, 192 pages, \$5.95.

BAJA CALIFORNIA BY ROAD, AIRPLANE AND BOAT by Cliff Cross. Author of a popular travel guide to the mainland of Mexico, Cross has compiled a comprehensive book on Baja California. The new guide is well illustrated with detailed maps of the villages and bays along the 1000-mile route plus travel, history and fishing information. Large format, heavy paperback, 170 pages, \$3.50.

SOUTHWESTERN INDIAN ARTS & CRAFTS by Tom Bahti. Beautifully illustrated with 4-color photographs, this book describes the arts and crafts of the Indians of the Southwest and offers suggestions on what to buy and how to judge authentic jewelry, rugs, baskets and pottery. Large format, heavy paperback, 32 pages, \$1.00.

INYO MONO JEEP TRAILS by Roger Mitchell. Author of *DEATH VALLEY JEEP TRAILS*, veteran explorer Mitchell takes you on 18 different 4-wheel-drive trips into the Sierra Nevada Mountains, where he explores ghost towns, Indian territory and scenic canyons and mountain passes. Paperback, 36 pages, illust., \$1.00.

DUTCH OVEN COOKBOOK by Don Holm. Wildlife editor of the Portland Oregonian, the author has spent his life exploring and writing about the outdoors, so his recipes for preparing food in a Dutch Oven come from experience. If you haven't had food cooked in a Dutch Oven, you haven't lived . . . and if you have you will find these recipes new and exciting culinary adventures—as well as his style of writing. Heavy paperback, 106 pages, \$3.95.

NAVAJO RUGS, PAST, PRESENT AND FUTURE by Gilbert S. Maxwell. Concerns the history, legends and descriptions of Navajo rugs. Full color photos. Paper, \$2.50.

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THE WONDERFUL PARTNERSHIP OF ANIMALS AND MAN by K. L. Boynton. A book that should be read by everyone interested in staying alive, it tells the story of how life on earth developed through the ages by plants and animals working together and how this partnership must work today so man can continue to exist on this planet. Large 8x11 format, heavy paper, 48 pages, \$1.00. After reading this book you will realize why it is really a "matter of life or breath."

SOUTHWEST INDIAN CRAFT ARTS by Clara Lee Tanner. One of the best books on the subject, covering all phases of the culture of the Indians of the Southwest. Authentic in every way. Color and black and white illustrations, line drawings. Hardcover, 205 pages, \$15.00.

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GHOSTS OF THE ADOBE WALLS by Nell Murbar- ger, the well known "roving reporter of the desert." An intimate chronicle of Arizona's once-booming mining towns, stage stations, army posts, marauding Indians and fantastic human characters. 380 pages, illustrated. Hardcover, \$7.50.

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GHOST TOWNS AND MINING CAMPS OF CALIFORNIA by Remi Nadeau. The only good, hardcover book on the California ghost towns. We recommend it highly. \$5.95.

LOST DESERT BONANZAS by Eugene Conrotto. Brief resumes of lost mine articles printed in back issues of *DESERT Magazine*, by a former editor. Hardcover, 278 pages, \$7.00.

CALIFORNIA GOLDEN TREASURES by Charles Laudier. Treasure clues for the Mother Lode country. Full of tips and hints, paperback, \$3.00.

SOUTHWEST INDIAN COUNTRY by the Editors of *Sunset Books*. A concise and comprehensive guide covering the 48 reservations and Pueblo villages in Arizona, Utah, New Mexico and Colorado. Includes what to see, how to buy, conduct, history, and ceremonials. Large format, colored illustrations, heavy paperback, 80 pages, \$1.95.

COLORFUL DESERT WILDFLOWERS by Grace and Onas Ward. Segregated into categories of red, blue, white and yellow for easier identification, there are 190 four-color photos of flowers found in the Mojave, Colorado and Western Arizona deserts, all of which also have common and scientific names plus descriptions. Heavy, slick paperback, \$4.50.

GHOSTS OF THE GLORY TRAIL by Nell Murbar- ger is a fast moving chronicle of Western boomcamp and bonanza. Rich in human interest as well as authentic history, this book covers ghost towns of Nevada, western Utah and eastern California. Hardcover, 291 pages. Price \$6.75.

A FIELD GUIDE TO WESTERN BIRDS by Roger Tory Peterson. The standard book for field identification sponsored by the National Audubon Society. 2nd edition, enlarged with new section on Hawaiian birds. 658 in full color. Hardcover, \$5.95.

WESTERN CAMPsite DIRECTORY by the Editors of *Sunset Books*. Just published, this book lists more than 5000 private and public campgrounds in the 11 western states and British Columbia and Western Alberta, including hundreds of new campsites to care for the ever increasing amount of people taking to the open road. Just right for planning a vacation. Large format, slick paperback, illustrated, 128 pages, \$1.95.

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Volume 33, Number 9 SEPTEMBER, 1970

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A Peek in the Publisher's Poke

NOT MANY of us achieve our goals in life and it is a rare case when dreams come true. This magazine is the result of a man's dream that DID come true. That man, Randall Henderson, has left us a legacy of literature and ideals that shall be carried on. With his passing, the desert, desert dwellers, desert lovers and Desert Magazine lost their very finest champion. (See opposite page).

Mother Nature has provided her creatures that inhabit the desert with the instinct to stay out of the sunlight during the searing summer season, but humans do not seem to be so endowed. Each year the desert claims those that are foolish or unprepared to challenge the superheated air. A motorist and his wife tried to walk for help in the Barstow area and only one survived; two young Marines lost their lives exploring a mine near Winterhaven, Calif., when the temperature was 150° at the level where their bodies were found. Last summer three persons died in the Saline Valley. This particular tragedy prompted the placing of sealed canisters of water with markers identifying it as "survival water" for emergency use only. The sheriff's office at Bishop, Calif., reports that during the past winter season, these canisters had been dug up and riddled with bullets. It's just a little frightening when you read about things like that.

This month's Desert Safari is on the Mother Lode Country and we had so many interesting articles that we decided to expand it into a special edition. We were fortunate in acquiring the services of George Mathis, of Coloma, Calif., who has done a fine job of illustrating for us and produced an excellent map for the main story. Another issue is on the stands and I've got a Lode off my mind.

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In Memory of “Mr. Desert”

RANDALL HENDERSON, founder of Desert Magazine and a man who influenced and enriched the lives of untold thousands of desert dwellers, passed away July 4 at the age of 82.

His death ended an active career of more than 60 years during which he covered the deserts of the Southwest as a roving reporter. He described his experiences in incisive and poignant articles which appeared in the magazine he founded 33 years ago at an age when most men are planning to retire.

When he reached his 70th year in 1958, Randall sold Desert Magazine to devote his time to writing books and participating in conservation and desert protective projects.

His two books, *On Desert Trails* and *Sun, Sand and Solitude* are considered desert lore classics. At the time of his death he was writing a book on the Coachella Valley and Palm Desert area.

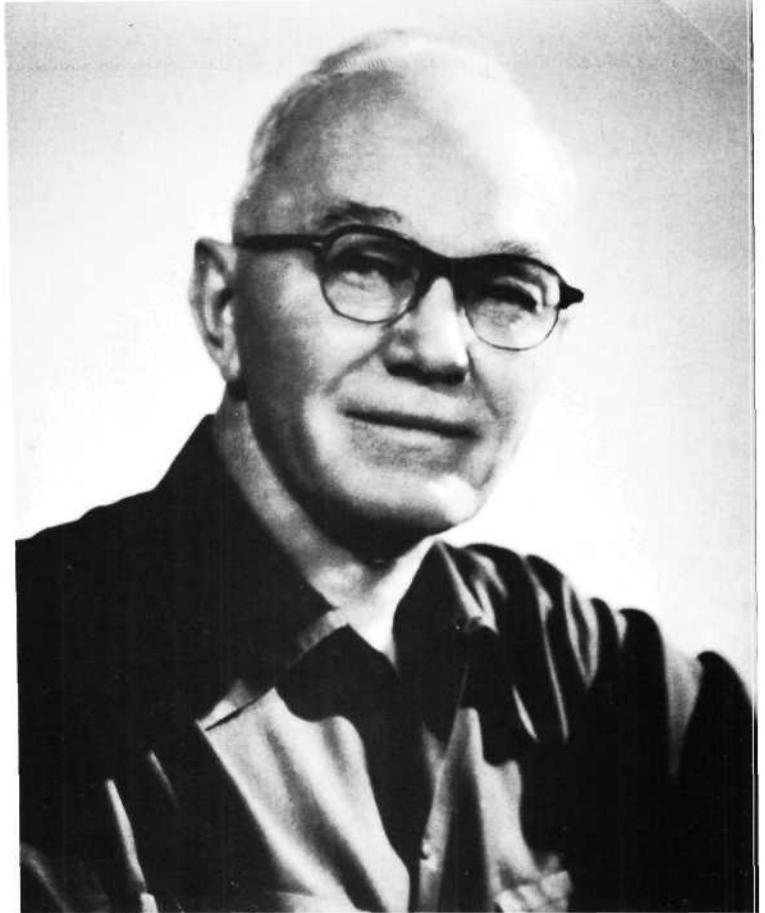
As editor of Desert Magazine, Randall was a creator of writers. He worked patiently with people whom he thought had talent and a feeling of the desert. Well-known authors and artists whose bylines first appeared in Desert include John Hilton, Russ Leadabrand, John D. Mitchell, Dr. Edmund Jaeger, Walter Ford, Harold Weight and Nell Murbarger among many others. He was a personal friend of Senator Barry Goldwater whose byline has also appeared in Desert Magazine.

He was known throughout the West as a compassionate man whose only intolerance was of those who desecrated or maligned the desert he so loved. One of his favorite quotations was from Naturalist John Muir:

Everybody needs beauty as well as bread, places to play in and pray in, where Nature may heal and cheer and give strength to body and soul alike.

Commenting on the above passage for

by
**Jack
Pepper**



a profile I did on Randall in the March, 1964 issue of Desert, he said:

"That was true when John Muir lived. It is a truth of even greater significance today, for these are confusing times. While humans push and crowd and burn themselves out in a crazy stampede for more profits and higher wages and the satisfaction of personal vanities, Nature goes along in her own serene way, undisturbed by the petty bickerings of the passing parade of *homo sapiens*."

An insight into Randall Henderson, the man and philosopher, is best gained from his now famous editorial, *There Are Two Deserts*, which appeared in the first issue of Desert Magazine in November, 1937.

One is a grim desolate wasteland. It is the home of venomous reptiles and stinging insects, of vicious thorn-bearing plants and trees, and of unbearable heat. This is the desert seen by the stranger speeding along the highway, impatient to be "out of this damnable country." It is the desert visualized by those children of luxury to whom any environment is unbearable which does not provide all the comforts and services of a pampering civilization. It is the concept fostered by fiction writers who dramatize the tragedies of the desert for the profit it will bring them.

But the stranger and the initiated see only the mask. The other Desert—the real Desert—is not for the eyes of the superficial observer, or the fearful soul or the cynic. It is a land, the character of which is hidden except to those who come with friendliness and understanding. To these the Desert offers rare gifts: health-giving sunshine—a sky that is studded with diamonds—a breeze that bears no poison—a landscape of pastel colors such as no artist can duplicate—thorn-covered plants which during countless ages have clung tenaciously to life through heat and drought and wind and the depredations of thirsty animals, and yet each season send forth blossoms of exquisite coloring as a symbol of courage that has triumphed over terrifying obstacles.

To those who come to the Desert with friendliness it gives friendship; to those who come with courage, it gives new strength of character. Those seeking relaxation find release from the world of man-made troubles. For those seeking beauty, the Desert offers nature's rarest artistry. This is the Desert that men and women learn to love.

The name of Randall Henderson will continue to be synonymous with the Real Desert as long as there are shifting sands of time.

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Book Reviews

by Jack Pepper

LOST MINES OF THE GREAT SOUTHWEST

by John D. Mitchell

Dean of the lost mine authors, John D. Mitchell spent his entire adult life investigating reports and legends of lost mines of the Southwest.

Lost Mines of the Great Southwest was first published in 1933 and from March, 1940 to August, 1953 a total of 43 of his articles were printed in Desert Magazine. Majority of the lost mine legends appearing in publications today are based on his original articles.

Out-of-print for many years, this book has been reproduced from an original copy by The Rio Grande Press, Inc., of Glorieta, New Mexico. It contains a total

of 54 articles on lost mines and hidden treasures, many of which are based on accounts from people Mitchell interviewed. All, according to the author, have been "verified and authenticated."

Naturally, any lost mine legend is a combination of fact and imagination. Whether you will use this book as a lead to search for lost mines, or as evening entertainment, it makes for fascinating reading. Hardcover, illustrated, 175 pages \$7.50.

GOLD MINES OF CALIFORNIA

by Jack R. Wagner

This is an illustrated history of the most productive mines of the Mother Lode Country with descriptions and anecdotes about the people who owned the mines and the roles they played in the development of California.

Although nearly 2.5 billion dollars in gold was dug from the earth in California from 1849 until World War II, extensive gold mining is a thing of the past and probably will never again be revived.

Profusely illustrated with rare historic photographs, the book describes in detail the major mining operations, and the problems and tragedies involved. The author has chronicled California's greatest and most exciting era—gone but not forgotten. Large 9x11 format, heavy, slick paper, 300 photographs and maps, hardcover, 259 pages, \$10.00.

NEVADA GHOST TOWNS AND MINING CAMPS

by Stanley W. Paher

Although Nevada is known today as the only state in the Union where gambling is legal, its early claim to fame was that of a territory that produced many millions of dollars in gold and silver.

A native of Nevada, Stanley Paher has spent four years collecting photographs and interviewing people for this exhaustive and fascinating book.

Covering all of Nevada's 17 counties, he has documented 575 mining camps, many of which have been erased from the earth. It contains the greatest and most complete collection of historic photographs of Nevada ever published, which, coupled with his excellent writing, creates a book of lasting value. Large, 9x11 format, 700 photographs, heavy, slick paper, hardcover, 492 pages, \$15.00.

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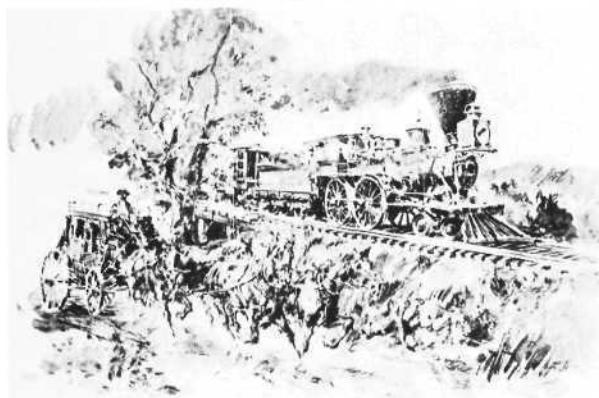
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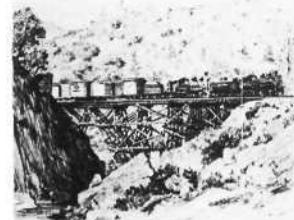
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Some of the old buildings of the Mormon community, including the church, are still standing. Original community was destroyed by flood in 1862.

HONK YOUR horn for the next stop and prepare to drive out of this speeding century into Grafton, Utah. Cross a little rickety bridge over the Virgin River and leave most of the 20th Century behind. Bring a camera and your imagination and let's take a walk.

Today Grafton is a ghost town, but one that enjoyed a brief revival a few years ago when portions of the town were restored for use as a movie set.

Located on the south side of the Virgin River about two miles west of Rockville on Utah 17, Grafton is a historic part of "Utah's Dixie." If you are visiting Zion National Park, save a few hours for this interesting side trip.

Grafton was the product of the dedicated Mormon movement a century ago when their people settled areas for farming. The result of that settlement today is a restored church and several interesting old split-log and adobe cabins.

In the 1850s settlers moved into the Rio Virgin valley at the gates of Zion Canyon. A few unsuccessful attempts were made at growing cotton, but prices were low, growing costs high, and Mother Nature a constant adversary.

With the coming of the Civil War, however, cotton became more important since all supply was cut off from the east. Efforts to grow the fiber were renewed successfully and cotton became an im-

portant crop in southern Utah. It was this industry that led Southern Utah to become known as "Dixie."

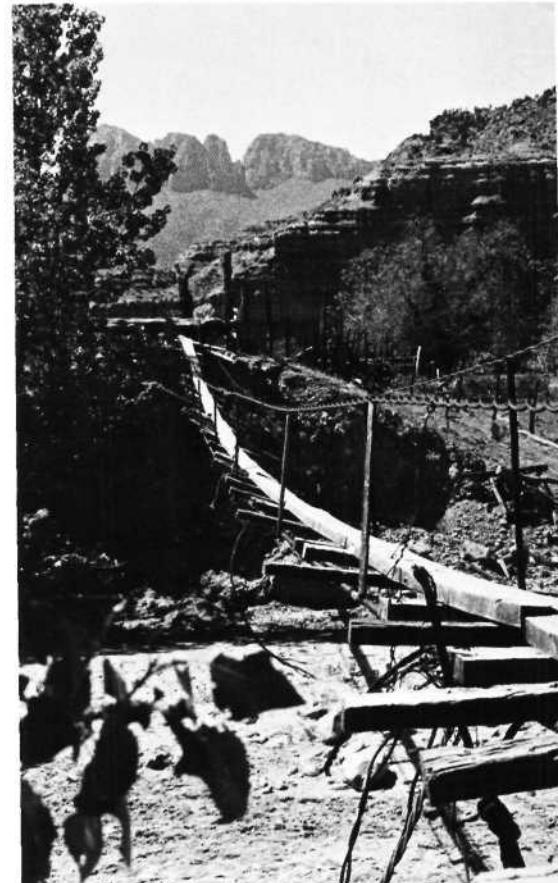
The road to Grafton today goes south across the Virgin River at Rockville, crossing an old bridge. But a more adventuresome way is crossing an old suspension footbridge near the point where the town can be seen from the highway. This bridge is not recommended for children or weak-hearted adults.

Grafton can be seen from the highway as you are heading east into Rockville. Look for it on your right. A dirt road turns off here on the west side of a low highway bridge and takes you to the river's edge and the suspension bridge.

Grafton's renovation for use as a movie set makes some the buildings look well-kept for a ghost town. There is enough of the old town, though, to give you authentic flavor of the place.

Being located on the river, the little Mormon town was subject to periodic floods. In fact the present Grafton is the second town of that name. The old Grafton was washed out in 1862.

During the flood, waters surrounded the home of Natham Tenney, whose wife was expecting a child. Several men picked up a wagon box along with Mrs. Tenney and moved it to higher ground where she gave birth to a baby boy. The baby was



appropriately named Marvelous Flood Tenney.

After the flood, Grafton was rebuilt on the south bank of the Virgin, further upstream and on higher ground. The new town was surveyed and laid out in residential lots and fields. It was one

GRAFTON

UTAH

by
Ernie
Cowan

of many small settlements in the Virgin River Valley, including Adventure, Rockville, Shunesburg, Northrop, Virgin City and Springdale. An 1864 census by the Mormon church showed 129 families along the upper Virgin River. Grafton

had a population of 168 people in 28 families.

Life in the Virgin River settlements was difficult at best, and intolerable at worst. Many of the Mormon settlers gave everything they could to answer "the call." In some cases this meant life itself. On some of the grave markers at Grafton there is a name and the brief statement "killed by Indians."

In 1866 Indian troubles resulted in an order for the settlers to concentrate in towns of at least 150 families. This meant the smaller settlements like Grafton, Duncan, Northrop, Springdale and Zion were abandoned. Crops at the abandoned towns still had to be cared for, however, so armed groups of workers

made daily or weekly trips to the fields. The concentration lasted into 1868. With the end of the Indian war against the Paiutes a general reoccupation once again peopled Grafton.

Farming prospered for the next five years and the Rio Virgin settlements continued to grow. In 1873 a national financial crisis spread over the nation, paralyzing much of Utah. There is little historic account of Grafton after this date.

Today Grafton is privately owned, but it is not closed to visitors. Some of the old buildings are boarded and posted against trespassers, so respect these signs. There are no signs of vandalism in Grafton. If you visit there, don't leave behind these signs of the 20th century. □



Narrow foot bridge (above) crosses the Virgin River which becomes a roaring torrent during flash floods. Grafton has been the site for several movies so combines old and new buildings.





Desert Speed King

by K. L. Boynton

© 1970

A NOBLE BEAST is the dashing pronghorn—speed champion of desert and high arid plains. Born to the boundless space of a vast and open land, he can outrun anything on four legs. Alert and watchful, he's trigger fast in reaction. Small, compact and trim—seemingly fragile as he stands poised on his long, slim legs and dainty hooves—he's actually tough and hardy.

He's at home in his kingdom of sage brush and sand, for his ancient clan had its beginning on this continent. Strictly an American product, the pronghorn tribe must have evolved along independent lines exceedingly early. Fossil remains of his ancestors, dating back at least 30 million years, look much like today's models.

Compared to this family record, members of the deer tribe and buffalo are johnny-come-latelys, arriving as immigrants from the Old World perhaps as recently as 500,000 years ago.

The pronghorn is also a very special piece of merchandise. Resembling an antelope and looking like a goat, it is neither—although its scientific name *Antilocapra americana* (antelope-goat-American) is a nod in that direction. So different is this animal from others of the great brotherhood of cud-chewers it has no close relatives anywhere, and hence is classed by itself.

A different placenta starts matters off at the beginning, for example, and there are many other differences both in inside

works and outside anatomy.

Horns decorate the heads of other kinds of hoofed animals and come in some pretty fancy styles, but they all fall into two types: the hollow horn, and the solid bone type. Cattle, sheep and goats had hollow horns made of hardened tissue, complements of growth layers deep in the skin. These animals keep their hollow horns throughout their lives, for, as they wear, they are constantly renewed from within. Hollow horns are never shed.

Members of the deer tribe, on the other hand, have bony horns, which are outgrowths of the skull. After the breeding season, these bony antlers weaken at their bases and break off—new ones growing

out from the stumps on the skull in time for the next matrimonial season.

The pronghorn's are hollow, but unlike the normal hollow horn, are shed and renewed each year as are the bony style, a combination of circumstances not found elsewhere. The curved and pronged parts of these horns are only sheaths made up of hardened tissue and hair. They fit like gloves down over the two finger-like spikes of bone projecting some three or four inches out from the animal's forehead over each eye. After the breed-

Clad in his homeland's seared and dry colors, he is highlighted by splashes of white with touches of black that break up his body outlines, creating a camouflaging effect. The resulting patchwork of buffy brown, black and white disappears into the desert scenery.

Being able to spot danger at a distance is of prime importance to a plains-dweller. The pronghorn has developed extraordinarily good eyes that are farsighted and have a retinal set-up especially good for catching movement. They

Plants provide some moisture, cactus being especially succulent, and many varieties have spines far enough apart for the pronghorn to get his dainty muzzle in between. The animal can also drink bitter alkaline water, a great advantage conferred by ancient association with the desert.

The pronghorn is a gregarious fellow, liking the company of his own kind. His white rump patch is his clan badge, a recognition mark seen from afar and even through darkness that helps keep the herd

*Pronghorn horns
(opposite page)
play an important
part in the survival
of the unusual desert
animal. The white
rump of the prong-
horn serves as a
signalling device in
case of danger.*



ing season, the horny sheaths gradually loosen at their base and from their bony spike cores and drop off.

The core remains, hidden in the long forehead hair and covered by a membrane which thickens and develops into the new horny sheath. Growth starts at the tip of each core, working in both directions: downward to the base, and upward and outward to make the curved horn with its prong. In about four months time, the new horns are fully grown and ready for business. The horns of the female are small, standing short and straight over their bony cores.

Smaller than a deer, the pronghorn stands only about three feet at the shoulder, weighing about 100 to 125 pounds.

are very large, providing a big visual surface and they protude slightly from their sockets, giving him a wider angle of vision. Since they are set to the sides of his head, he can see quite a bit of scenery around to the rear without turning his head. Grazing, he can still see between his legs, raising his head between cropping for a quick overall glance around.

Grass, flowers, weeds, bitter wormwood, sagebrush, Russian thistle are among the desert plants on his menu, most of which are hard, tough and gritty —bad news to teeth generally. But not to pronghorn molars. Standing like skyscrapers, they have a grinding surface that is flat, but ridged and patterned into many cutting edges.

together. It is also a fine signalling device whereby the herd is informed of danger and united for action.

The hair here is longer than elsewhere on the body, and usually lies flat. But underneath is a broad sheet of fast-acting muscle fibers which, connected to the hairs, jerk them upwards and out into two great rosettes when the animal is alarmed. So sudden is this movement and so glistening white the fur, that the patch now becomes a flashing signal.

Every pronghorn that sees it flashes his own, and so the alarm is quickly spread. Spread, too by scent, for in the middle of each rosette is a gland which when exposed, emits a strong musky odor. Pronghorns a mile away can pick

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up this smell news, for their sharp noses are equipped with highly developed olfactory surfaces. Away they go — rump patches flashing, as one old prospector put it poetically: "Like sunlight blazing off tin dinner plates."

The pronghorn early evolved as a plains-dweller, built for speed. His is a running leg, long and slim, with the foot bones so pulled out and long that he actually runs on the tips of his third and fourth toes, the others having disappeared long ago. Horny shoes cover the toes, resulting in a double hoof on each foot. Built-in shock absorbers cushion the foot's impact with the hard ground and other devices adjust the hoof to uneven surfaces, making the pronghorn very sure-footed, indeed, even at high speed.

The leg joints work in a tongue and groove system — greatly increasing the power and freedom of forward and back movements. Driving his fast geared legs, are outsized upper limb muscles and a backbone whose action catapults the animal forward. Stretched out and really running, he can hit about 34 to 38 miles per hour for a short distance making him probably the fleetest of North American mammals.

What happens in the face of a wolf attack seems to depend on how many pronghorns are in the group. If about 12 to 15, they form a tight unit and the bucks fight off attackers. If the band is smaller, they rush off in all directions — a tactic which, while it confuses pursuers, makes the slower ones quite liable to be caught.

This small band defense problem is relatively new to the pronghorn, for it began only with the westward movement of the white man, which resulted in a spectacular decline in pronghorn numbers. At one time hundreds of thousands of these handsome animals roamed

the plains as far east as the Missouri River. There was a very old association with bison herds beginning, probably, when the buffalo arrived from the Old World. Both animals benefited, for as they grazed the alert and exceptionally long-sighted pronghorn were quick to spot danger first, warning the entire community. Buffalo brawn then defended them all — pronghorn young included.

October is pronghorn hoe-down season. Each buck, once he has collected his small harem, sets up a territory which he marks with scent glands located just back of his jaws, and which territory he defends against rivals. The territory is only about 1/16 to 1/8 square mile, but about all a fellow can handle, since he not only has to keep his four or five giddy wives from wandering off, but must prevent local bachelors from stealing them.

First indication that the territorial buck expects to keep his harem is plainly seen when he stands, head up, eyeing the challenging buck. Next he starts walking very slowly towards him, lowering his ears and neck to almost horizontal, turning now and then to show his full side and height. At this stage, most of the would-be rivals depart, apparently remembering important appointments elsewhere. A more doughty one might stay and be treated to the next stage: a very close approach by the territorial buck, who by this time has his head lowered, horns in position.

The rival, if still determined, lowers his head. They touch horns in mutual challenge. Then WHAMBO! with a clashing of horns, the fight is on! And here the prong on the horn shows what it's for. It serves as a defensive hilt, parrying thrusts; it also is a very lethal weapon, for, as Seton pointed out, when used with swift and deadly precision, it slips past the guard to rip open the rival's throat.

Actually, fighting seldom occurs, thanks to the ancient ritual, for the challengers almost always give up earlier, and if they indicate subordination, are even allowed to graze on the buck's territory, but never to lie near the does, even when cud-chewing. All this saves wear and tear on everybody. It keeps the bucks off the casualty list, and everybody in the good old herd frame of mind found essential for defense down through the ages.

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Gestation takes about 7½ to 8 months. The youngsters — usually twins — arrive well developed and soon are able to keep up with their elders, a matter of extreme importance to herd animals.

A dangerous time, these early days, with the problem ever present of how to hide a helpless youngster out in the open where there is no place to hide him. Models of deportment, pronghorn young show how it is done. Instantly, upon command of his mother, Junior "freezes," dropping down flat, ears folded back, neck outstretched. Absolutely motionless, he becomes one with the buff-colored desert, and he has no scent to give him away. He will not move until he gets his mother's okay.

Pronghorn youngsters develop faster than deer fawns. By the end of three weeks, they can do up to 25 miles per hour for a short distance, and incidentally, some fancy rump patch signalling of their own.

Pronghorns are curious animals, hanging about to see what is going on, perhaps over-confident because they know their own speed capabilities. Biologist Waring, interested to know what part sounds played in pronghorn life, set up a recorder in his camp near the Colorado-Wyoming border. A buck kindly obliged by paying a visit one night. He did not see Waring who remained still. The buck looked around, and then made a series of unvoiced blowing sounds about nine seconds apart. Trotting a short distance away, pounding his hooves loudly, he stopped and looked back, head and ears erect. He blew a few times more. Apparently this blowing noise is made in the presence of suspected danger, tipping off listening friends that something may be wrong.

Waring also concluded such blowing can make the "danger" reveal itself: coyotes and wolves and, certainly, men are curious, too, and, to see what is doing the blowing, give themselves away by moving. Which is exactly what the canny pronghorn is waiting for. Rump patch flashing the alarm, he's off like a shot.

Zoologist Gregg also describes another sound: Eight sneeze-like notes descending in pitch and volume sounding suspiciously like a horselaugh. Rendered under pertinent circumstances, it has, no doubt, been considered quite satisfactory to pronghorns down through the ages. □

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GOLD DIDN'T mean much to Caleb Greenwood — at the moment at least. In 1849, while others were frenzied with excitement at Sutter's Millrace, Old Greenwood was content. Grizzled, sun scorched and in the sunset of his years, his needs were simple. He only asked to share a spot in the California sun, time to hunt, good whiskey to drink, and someone to spin a yarn with. Caleb had been everywhere, and seen more than he could remember. When he told of it, he spoke with assurance and austerity. If memory lapsed, there was an improvisation, without hesitation.

Sutter's strike did not make an impression on old Caleb, but he was meshed into the intoxication of the swelling populace. He drank with them, listened to their illusions, and watched as they exhibited their nuggets and flaunted pokes of gold.

Caleb had taken Indian wives and learned from them the lore, dialects and hunting skills of the tribes. But most significant to Caleb were the ancestral legends—tales handed down from generations. The legend of the Golden Lake surfaced his memory frequently these days. The story clearly portrayed a lake where wind-swept waters washed against the shore. It cleansed the cobbled strand, revealing the glistening rocks—gold in color and brilliant to the eye. They formed a lining of gold silt and gravel at the bottom of the lake. The reflection was golden, and to all appearances, it was a Golden Lake.

Fantasy merged with reality in Caleb's mind. He thought of the small lake where his wife and their young had made a summer home. He recalled the rocks they had collected and how they had glistened in the sun.

Now, when he related the legend of the Golden Lake, people were captivated. "Where," they asked, "was this lake, with its shore of gold nuggets—could he lead them to it? How soon could they start?" Old Greenwood, whose body was spent of its energy, declined to make the trip. However, he offered to back his statements with the offer of his son, John, as a guide. That is, he told them, if they would put up the grub stake, and allow him his cut before they left. After all, he had no need for wealth, he just wanted contentment!

News spread. Interest focused on old

Gold Lake... Fact or Fantasy

by Helen Walker

Caleb as he stood in the dusty street waving his weathered hand toward the northeast, and shouting, "Fortunes are awaiting the lucky ones, go, go!" John, his son, spoke sincerely about his recollections of having played with the shiny rocks.

The audience, eager and easy to convince, were willing to face the hardships, and impatient to reap their reward. Fortune hunters vied for the privilege to pay their money and sign on. Qualification was simple—lay your money down, and sign your name. Caleb collected the money. John stockpiled supplies and made a feeble attempt at organization. Included were city slickers, a sailor with a shady past, the young seeking adventure, and the old making a last desperate trek.

Those left behind declared a holiday on the departure date. Saloons were emptied as John led his party toward their ultimate fame and fortune. Horses reared as shots cracked the air, and mingled with the exuberance of the crowds. As

the dust settled, old Caleb stood in the street, clutching his share of money in one hand, and directing them with the other. "Travel northeast," he told them, "over the ridges, each valley getting higher. Keep the faith, 'cause behind those craggy mountains you will find the lake sunken from view." "Gold," he shouted, "nuggets the size of your fist, everywhere . . ." His voice cracked, as he became a blurr in the drifting crowd. He turned with the others, and moved toward the saloon.

The new page on the calendar had not collected dust when the hungry and disgruntled party returned empty handed. Their fury had been spent on John. Lakes they had found — but no color. Old Greenwood was now the object of their unleashed malice. He listened to their accusations and threats. His only comment to them was, "John had been just a young'n. The color was there—you just missed it, somehow."

It would have all ended there. But



appointing lake to another, he began to sense the unrest of his followers.

Out of this futility and desperation, he perhaps said, "this looks like the one!" The mob of impatient men swarmed the shores. They dug at the moss which had encrusted the sun baked rocks. They found no color—just sculpture of time and weather. They forced Stoddard to prod onward, in blind search of their goal. As the days passed, Stoddard began fearing for his life. At the first opportunity, under the protection of darkness, he slipped away.

Stranded, exhausted and confused as to their location, the men fought for survival. The stronger grabbed the supplies and horses and sought shelter in the valley where familiar patterns of mining led them to the rivers and the source of the gold—the Mother Lode.

The Yuba and Feather Rivers, each of which supported multiple tributaries, carried gold into the streams. The discoveries stamped the transition from wilderness to flourishing mining settlements. The famous mining camp names of Poker Flat, Whiskey Diggings, and the Eureka Mine were only a few among the many. Not a bit unusual were nuggets ranging from \$100 to \$1000 each. Tent camps were replaced by board and bat cities. Merchants and leeches followed the strikes. Families were sent for, and comforts soon replaced the hardships. Gold was spent at the same pace it was made—fast and easy.

The northern Sierra had reached its maturity and Caleb's tale and Stoddard's march had passed into a memory by the year 1860. However, their illusions had forced the opening of the gold country. Fortunes were made in the next decade, and the lucky ones stepped out of the bitter cold and into the warmth of luxury. Relief was sought in lush resorts, and champagne picnics on the grassy shores of high mountain lakes.

Who is to judge Caleb's mythical lake was only a fantasy? Or, if Thomas Stoddard did find Caleb's lake and reap his gold nuggets on the shore? So, just in case you still ponder this possibility, watch as you step along the cobble shores of the High Sierra tarns, and dig your fingernails deep into encrusted moss on the rocks at the shore of Gold Lake. The discovery is yours to make. Was the Gold Lake fact—or fantasy?



these resolved men, even in face of defeat, were not wholly convinced Caleb's lake was only imagination. They whispered their theories in confidence, reviewing possibilities over flickering fire-light. Small parties were secretly outfitted and slipped away in the cover of darkness.

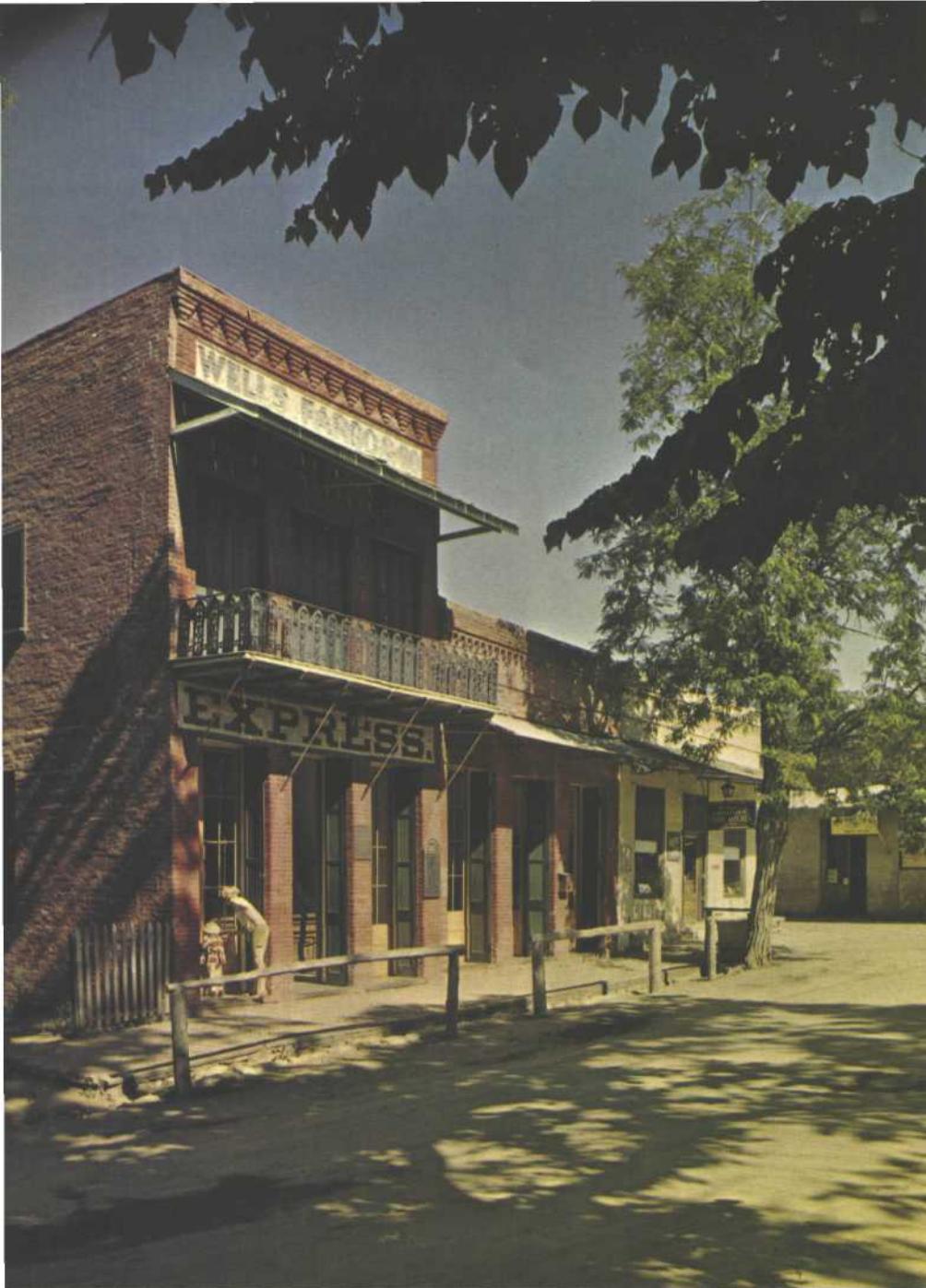
Some sought more concrete reasoning. Maps were pored over, but the few available only added to the confusion. Having been published prior to 1860, their details were sketchy, and many locations printed on mere hearsay. Prime example of this shows in the numerous lakes qualified to fit into the category of the mythical lake. Included were Webber, Independence, Lake of the Woods and others. All had shorelines of exposed rock—their locations obscured by mountains. Each had been tagged as Truckee Lake by the mappers of their day.

Thrice told tales of success and failures filtered through the camps from scattered points in the northeast. Thomas

Stoddard claimed to have found the lake, collected his gold, and returned. Stoddard, like old Greenwood, spoke with convincing tones. He related how he had been wounded by Indians, but escaped with his life. He showed scars from his wounds and flaunted pokes of gold to prove his story. Stoddard succeeded in enlisting enough people willing to gamble money, life and time. Those who signed on agreed supplies were to be carried only as far as the lake. At the end of the trail each was on his own to carry out all gold he could manage himself. They could travel faster with half rations.

As they trudged through the valleys and over the summits, they were joined by poachers along the trail. Stoddard became bewildered and confused. His responsibility was more than he could cope with, or perhaps he was attempting to avoid spreading so thin, his once coveted source of wealth. As his erratic course maneuvered the group from one dis-

The



The Wells Fargo office in Columbia—now a California State Park—handled 87 million dollars in gold during the Gold Rush days. Photo by David Muench, Santa Barbara, California.

HERE WERE an estimated 15,000 inhabitants of California when it was ceded to the United States at the end of the war with Mexico in January, 1848. If they had known what was to occur exactly one year later, the Latin Americans might have continued the struggle for their land—and possibly changed the course of history.

For five years later there were 225,000 people in California of which 120,000 were either searching or digging for gold in a confined 226-mile area along the western slope of the Sierra Mountains. Called the Mother Lode Country, it was the site of the world's largest population explosion and land boom.

Although the historical hysteria only lasted some 20-odd years, during that time hundreds of millions of dollars in gold was torn from the earth. Today, the Mother Lode Country is once again booming—this time with tourists, fishermen and hunters.

The era—whose drama equals that of a blood-and-guts fiction novel—started on a cold day in January, 1848 when John Marshall, while examining the tail-race of John Sutter's partially completed sawmill on the American River, picked up a yellow piece of metal. The find, which changed the course of western history, was described by Henry W. Bigler, a sawmill worker:

"Monday 24th this day some kind of

mettle was found in the tail race that looks like goald first discovered by James Martial, the boss of the mill."

Although his spelling was not exactly accurate, Bigler did record the incident that started a stampede which would bring Argonauts into the then pastoral California from the eastern United States, Australia, China and Europe to compete with the native Yankees and Mexicans in the feverish and savage struggle for gold. But it was a year before the stampede started.

Not being a miner, Marshall took his yellow metal to Sutter, who had established the first inland settlement in northern California at the confluence of the Sacramento and American Rivers.

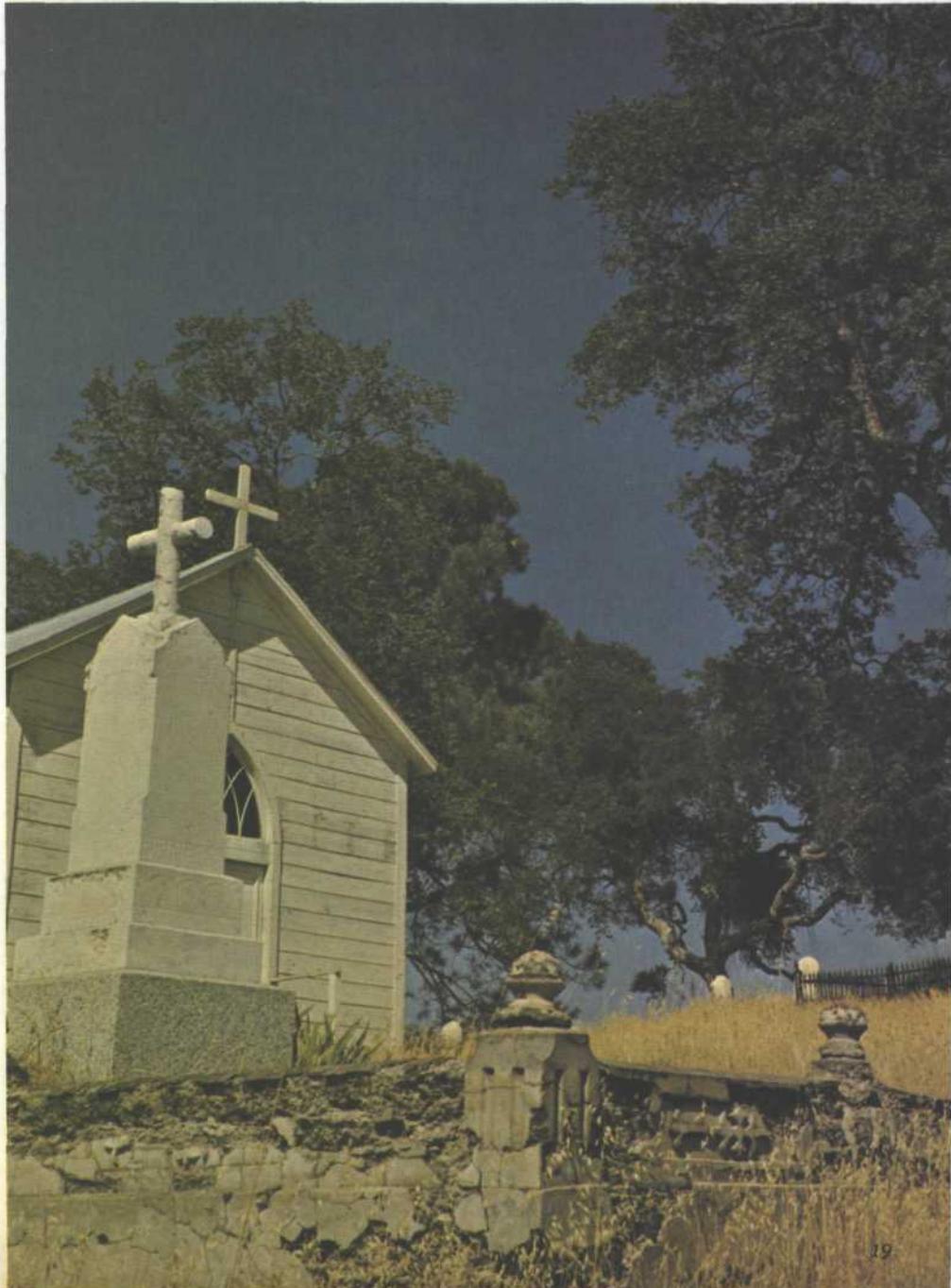
Mother Lode

by Jack Pepper

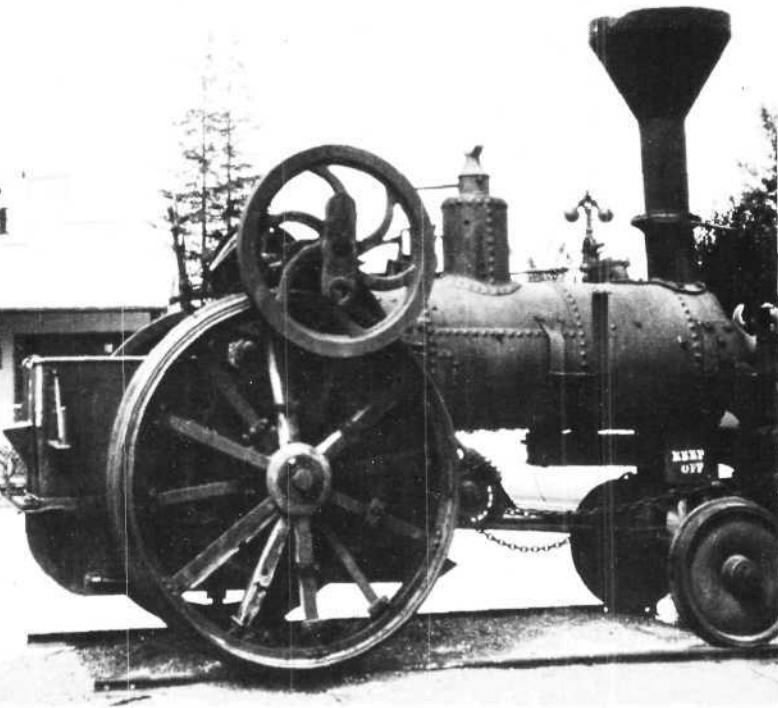
Desert SAFARI

The discovery of gold in the Mother Lode Country and the ensuing Gold Rush that changed the history of the Western Hemisphere — and was felt throughout the world — are covered in this month's Desert Safari.

The St. Francis Xavier Catholic Church at Chinese Camp was built in 1855 and restored in 1949. Majority of the 49ers buried in the cemetery were from Ireland. Photo by Jack Pepper.



ANGELS CAMP
MUSEUM

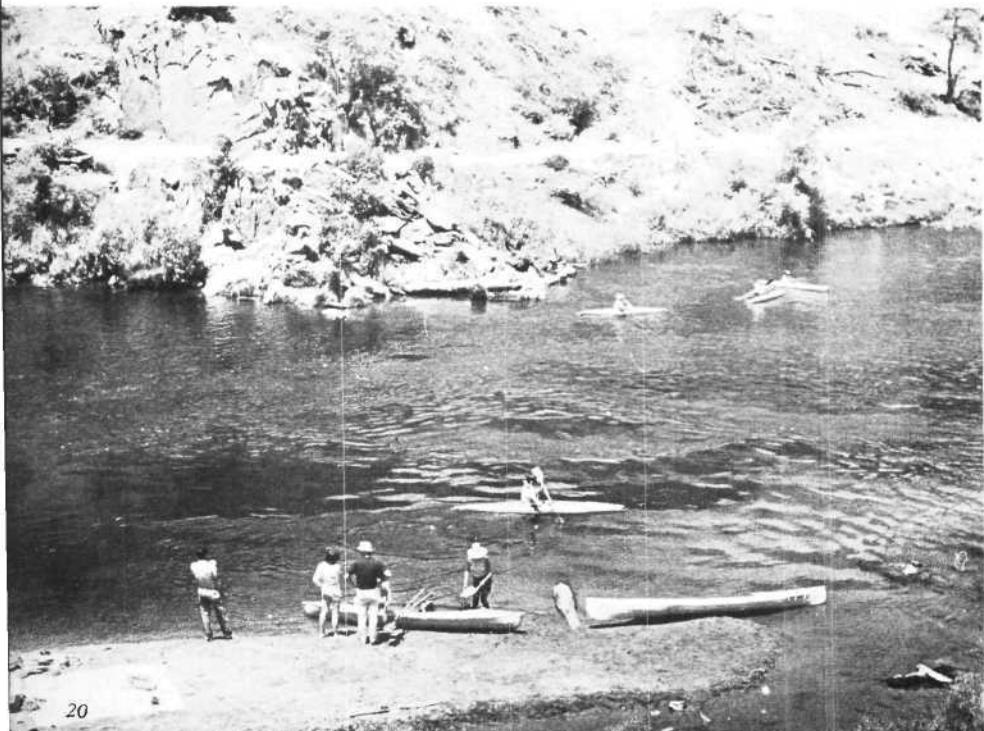


Marshall arrived at Sutter's Fort on January 28 and after numerous tests, Sutter decided the metal was gold. This was on February 2, 1848, the same day the United States and Mexico signed the treaty of Guadalupe Hildago, ceding the territory of California to the United States. (On September 9, 1850, largely due to the discovery of gold, California was admitted into the Union as the 31st state.)

Meanwhile, back at the sawmill, while honoring their pledge to secrecy about the yellow metal, workers were taking modern day "sick leave" and sneaking off the job to pan for gold.

Although finished on March 11, 1848, the mill was short-lived. It was torn down five years later by miners who wanted the lumber for gold-panning sluice boxes. Today, a complete replica of the mill is one of the many tourist attractions at Coloma and the Marshall Gold Discovery State Park — the site where the California Gold Rush began. (See map.)

Realizing the value of Marshall's discovery, Sutter sent Charles Bennett on a secret mission to Monterey to secure the land rights at Coloma. However, Bennett was a loud mouth and told everyone he met about the discovery.



The Angels Camp Museum on State Route 49 houses one of the best collections in the Mother Lode Country, including a fine rock and semi-precious gem exhibit.

Few believed him. Even when the first story of the discovery was printed in a San Francisco newspaper on March 15, little attention was paid to the article.

Gradually, however, as reports of more spectacular finds came down from the mountains, the gold fever gripped San Francisco and on June 14, 1848, the last of the city's newspapers temporarily suspended publication for lack of readers. The readers—and non-readers—had all headed for the gold infested hills.



At the same time, newspapers in the eastern United States, Hawaii and Europe were printing stories on the gold bonanza. The world's greatest exodus and boom was underway.

Spurred by the newspaper accounts, steamship and overland stage promoters (the forerunners of today's travel agents) rumors and just plain imagination, men of every race, creed and color literally poured into the Mother Lode Country.

*There are many rivers and creeks along the Mother Lode route affording opportunities for boating and fishing in the clear—and cold—waters.
Boaters float down the rivers.*

Pony Express Days are held every July 4th in the Placerville area.

As they did 120 years ago, riders deliver mail to Pollock Pines, one of the few remaining original Pony Express stations.

They were called 49ers or Argonauts, the latter from the Greek legend of the men who sailed with Jason in search of the Golden Fleece.

But these Argonauts were not searching for a legendary Golden Fleece. They were after the solid gold of California where they would make their fortunes and return home as conquering Jasons. So they left their families, businesses, ranches and farms and headed for the land of golden promises. They were



vived, and of these only a few thousand found the Golden Fleece.

To follow the trail of the Golden Fleece and relive the days of the '49ers, take California's State Route 49 which starts at Mariposa on the south and ends at Downieville on the north. Known as the Golden Chain Highway, it parallels U.S. 99 from Fresno to Sacramento and Marysville. (Or you can go from north to south.)

The paved highway snakes through the Mother Lode Country for 266 miles with an average altitude of 1500 feet. It curves through scenic mountains, drops down to cross cool streams and rivers,

levels out across verdant valleys and is dotted with hundreds of historic monuments, plaques, museums and 500 towns which popped up like mushrooms during the 20-year Mother Lode boom.

You will recognize only a few of the towns as the majority are either completely leveled or off the many interesting side roads which lead to the east and west veins of the Mother Lode.

Although too numerous to mention, the major side trips should include Hornitos, Columbia, Moaning and Mercer Caves, Murphys and Volcano. These are a MUST to capture the feeling of the Mother Lode.

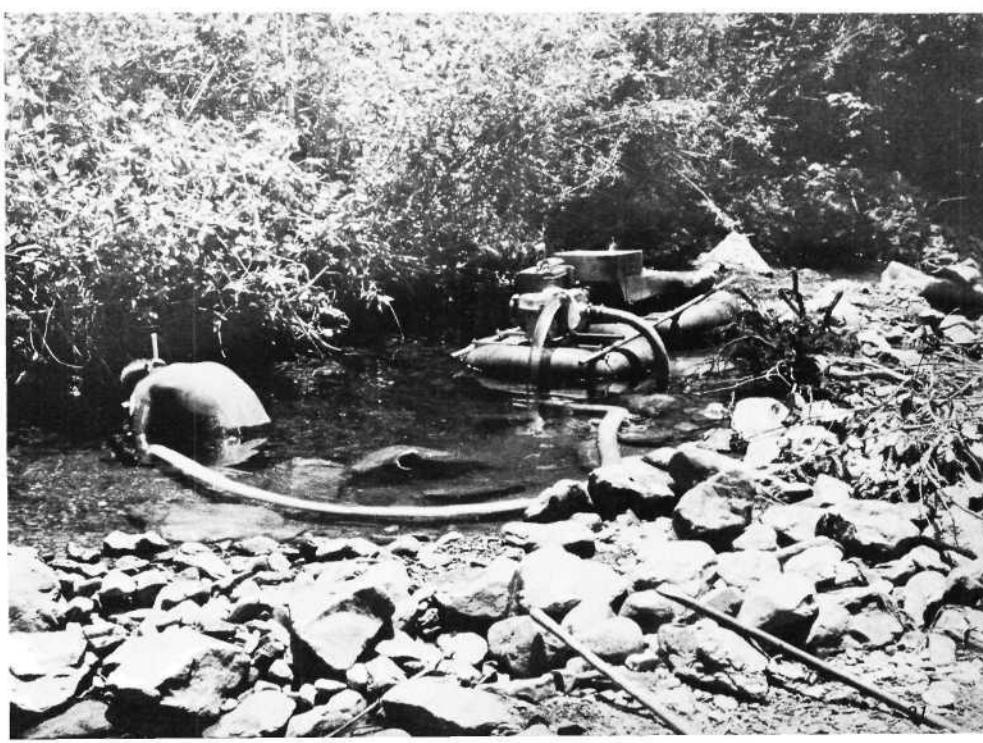


joined by crooks, con-artists, outlaws, murderers, gun-slingers and other characters of either higher or lower repute.

Like Jason's, their search was not easy. Unable to cope with the severe weather and the rugged mountain terrain, thousands returned home after only a few months futile search. Thousands of others met either natural or violent deaths and were buried in unmarked rocky graves. Only the most capable—and lucky—sur-

An exact replica of Sutter's Mill (above) where gold was first discovered, is one of the many attractions at Coloma.

Today, modern Argonauts (right) still find gold.





Miners Only!

Ranging from the simple one-man gold panning method to the complex hard-rock quartz operation, there were various means of extracting gold from the Mother Lode Country. Following are some of the terms used by the miners.

MOTHER LODE. The main vein of gold-bearing quartz extending from Mariposa northward and from which came nuggets and "flour" gold.

PLACER GOLD. Gold which, through weather and erosion, has been freed from its quartz matrix and is found either in banks or in streams and rivers where it has been washed down from its parent lode. Placer or "free" gold can be either large nuggets or fine particles of "flour" gold.

PANNING. The simplest and easiest method used to separate gold from the dirt and rocks. Gold panning techniques are centuries old throughout the world. The Mexicans were experts at this method, calling their gold pan a *bateda*. Due to its slowness, this method was soon replaced by teams working together.

ROCKER. Also called a cradle, it was a rectangular wooden box, set on a slope and mounted on rockers. A series of riffles were at the bottom. Dirt was poured through a sieve at the top and then a bucket of water. The mixture was agitated by "rocking the cradle" which forced the dirt to wash down and out of the rocker while the heavy gold was caught in the riffles or cleats.

This method worked for coarse gold, but failed to catch the fine particles of "flour" gold, so small amounts of mercury were put on the bottom of the cradle. While refusing other particles, mercury will trap fine gold. The miners would then heat the mercury which would vaporize and leave the trapped gold free.

LONG TOM. An enlarged rocker, the Long Tom was approximately 20 feet long and a foot wide and was operated usually

by three men. Two shoveled dirt while the third kept the dirt and rocks moving. Since it needed a continuous supply of fast moving water, the Long Tom was only used in streams or rivers.

SLUICE BOX. An even longer version of the Long Tom and operated by a crew of men who worked on the theory: the more riffle boxes the more gold. The fine particles of gold were removed from the sluice box by reverting to the panning method.

HYDRAULIC MINING. This was the most efficient—and the most destructive—method of getting gold out of the earth. Miners used high-pressure hoses and sprayed the gravel banks, forcing the material to wash down into sluice boxes. Since this was the fastest method at that time of getting gold, the process rapidly spread and by 1859 there were more than 5000 miles of canals across the Mother Lode Country supplying water to the big nozzle hoses which required 30,000 gallons of water a minute to operate.

Miners were not conservationists and few knew the meaning of ecology. But when the hydraulic waste started to clog the rivers, inundate the farm lands and play havoc with the merchants, it was time to call a halt. In 1893 a law was passed prohibiting miners from hydraulicking unless they could dispose of the waste. Since this was impossible, hydraulic mining passed into oblivion.

QUARTZ MINING. Known as "hard rock" mining, this method was the most profitable, yet it could only be accomplished by large capital investments. As the placer gold played out and hydraulic mining was prohibited, companies were formed to blast the gold out of the quartz veins and then pulverize the rocks in giant stamp mills. This was the final—and most lucrative—phase of mining in the Mother Lode Country.



You can spend a weekend, a week, two weeks or a month touring the country and you still will want to return to visit other historical sites, or to fish in the many mountain streams and lakes, dig for old bottles, barter for artifacts, pan for gold—or just relax.

Your time schedule can be adjusted easily as there are many exit roads from State 49 leading back to U.S. 99 to Los Angeles or San Francisco. While on the Mother Lode route, don't be in a hurry. If you don't have time to visit the communities and stop at the historical monuments, you should have stayed at home.

For those traveling in passenger cars during the summer vacation season it is best to stop early for motel reservations, or make them in advance. Majority of the motels are in the few main communities along the way and rooms after sunset are at a premium.

For travelers in campers State Route 49 is a paradise. You can pick your spot along the streams or camp among the trees on the many side roads. However, camping sites immediately adjacent to swimming beaches are usually filled during the summer season.

Since there are literally hundreds of interesting and historical sites along State 49, only a few can be described. This does not mean those not mentioned are not worth seeing. For an excellent travel guide which lists all of the points of interest, I suggest the *Gold Rush Country* compiled by the editors of Sunset Books. For back issues of Desert Magazine with dramatic accounts of the history of many of the mining communities, see the listing on Page 39.

From Mariposa, which has California's oldest courthouse still in service since its opening in 1854, State 49 goes through Bear Valley to Coulterville. Bear Valley was the home of John C. Fremont, the famous army explorer who bought the land accidentally when his agent paid \$3000 for 43,000 acres against Fremont's instructions.

Coulterville is located on Maxwell Creek where modern Argonauts still pan and dredge for gold. Here you can hoist one in the bar at the old Jeffery Hotel and across the street visit with Vern Peppers, a former miner whose museum

WHERE TO EXPLORE MAP OF CALIFORNIA'S MOTHER LODE

"Gold was found in such fabulous quantity as to catapult a wilderness to statehood... altered the path of a nation."

C. MARSHALL MONUMENT at his hilltop gravesite points to the scene of his famous discovery.

ABOUT COLOMA, THE GOLD DISCOVERY SITE
James Marshall touched off the greatest Gold Rush ever recorded by picking up a flake of gold from the mill race of Sutter's Sawmill at Coloma, Jan. 24, 1848. Tens of thousands stamped to the

diggings as the cry of Gold was heard. A Monument marks Marshall's grave, his cabin is nearby, plus the sawmill he built. This friendly STATE PARK and area offers adventure for all.

ARRASTRAS reduced gold bearing rock to powder as stones were towed around a circular channel. Introduced by the Spanish and widely copied, you can still find traces of them all along the gold country.

If your gold mining interest runs to Glory Holes. Don't miss the ones at Carson Hill. Incredibly rich, these mines gave

In 1848 a rocker hewn from a hollow log was a profitable improvement over panning. Countless of these devices were to be seen on all the river bars and creeks before more sophisticated methods were adopted.



Millions of years ago, volcanoes east of here covered the area with hundreds of feet of ash (as Vesuvius buried Pompeii). This event was followed by eruptions of lava that followed the old river beds, pushing the ash aside. The ancient river bed carried lots of gold... it's still there... but covered with lava.

Sonora's Table Mountain is the old lava flow, the softer ash has been eroded away, exposing the gravel. Miners have driven countless tunnels under to mine the gold. The top of the flow can be explored... historical wagon roads have left their mark... you can still see rust marks where steel rims bounced off nodules formed when the lava cooled.

The dotted line is THE MURSE OF AN ANCIENT RIVER WHICH WAS BURNED BY LAVA.

Don't miss the dumps and partly caved workings of Kit Carson's mine, the Mariposa, 1848. Near the Fair Grounds.

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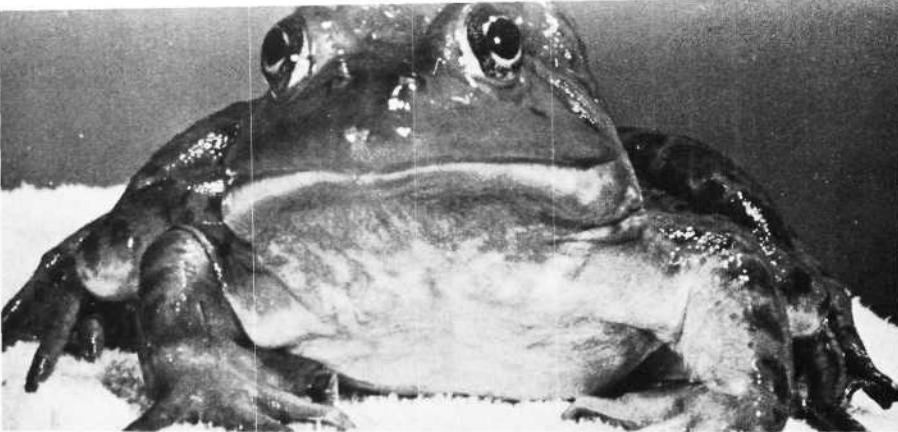
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One of the Jumping Frogs of Calaveras County flexes his muscles—and wonders who started the whole thing—in preparation for the annual event held every May.

houses one of the best gold nugget collections in the country. Although he charges 50 cents to see his museum, Peppers' (no relation to this writer) tall tales are worth every cent.

From Coulterville the highway passes through scenic mountains to Chinese Camp and Sonora, a modern city catering to the lumber industry and cattle raising. Just before Sonora is the community of Jamestown, located off the highway a half mile, but well worth the visit.

North of Sonora a paved road leads to Columbia, one of the most important and best preserved towns of the Mother

Lode Country. During its heyday, 15,000 people lived in Columbia and produced an estimated 87-million dollars in gold. Today it is the Columbia Historic State Park. There are dining facilities, many gift shops, a motel and lots of attractions for the youngsters, including panning for gold and riding on an old-fashioned stage coach.

A half mile from the State Park there is an excellent campground for camping, trailers or tenting. Look for the sign that directs you to Yankee Hill. You can either stay overnight or spend your entire vacation there. There are complete facil-

ties and rates are exceptionally reasonable. It is open the year-round.

The '49er Highway continues from Sonora over some mountain passes and down to the Stanislaus River and the community of Melones where 5000 people took nuggets the size of melon seeds from the river. (Melones is Spanish for melons.) By 1972 Melones and this area will be covered with water from a new dam upstream. In the meantime there is a small camping site where you can launch your boat.

En route from Melones to Angels Camp be sure to stop at the rest area at Carson Hill. It doesn't look like much, but Carson Hill in its heyday was considered the richest of the Mother Lode camps. The largest nugget in America's gold history was taken from Carson Hill. It was 15 inches long, 6 inches wide and 4 inches thick, weighing 195 pounds (POUNDS) troy and was worth \$43,000. Today, the same nugget would be valued at \$73,000. As you view the historical plaque look to the right and you will see one of the heavily producing quartz mines on the mountain above.

Continued on page 38



COPPER COVE AT LAKE TULLOCK

... where land and lake combine to create an atmosphere totally their own.



GREAT LAKES DEVELOPMENT CO., INC.
P.O. Box 1057
San Andreas, California 95249

Name _____
Address _____
City _____ Zip _____



GOLD BEACH PARK

On the Cosumnes River

FISHING
SWIMMING
CAMPING

15 MILES SOUTH OF PLACERVILLE ON STATE HWY 49
BOX 96 PLYMOUTH, CALIFORNIA

PICNIC
SNACK BAR
STORE

GOLD BEACH PARK

A rare find for the out-of-doors recreation-minded family. Above the fog and below the snow, there are 100 tree-covered acres with a mile of river frontage along the Cosumnes River on Highway 49, El Dorado County, 15 miles south of Placerville. It is an enjoyable two hour trip from the Bay Area, or only 40 minutes from Sacramento or Stockton.

Phone (209) 245-6594

Write for complete information

Name _____

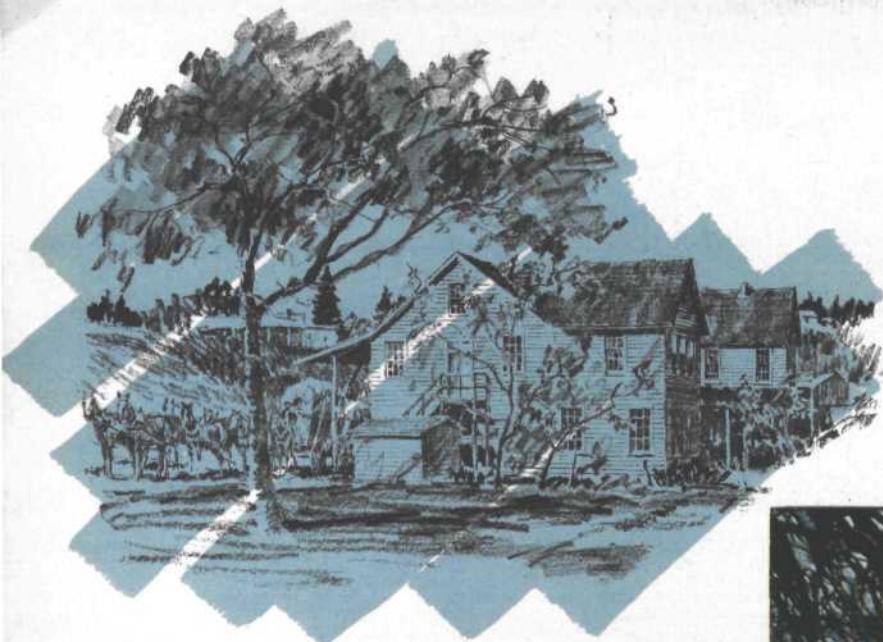
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HISTORICAL BACKGROUND

GOLD BEACH received its name from our forefathers because of the glittering golden sand on its river banks. The GOLD BEACH area was a rendezvous for gold miners. There are many abandoned mines remaining in the area. In 1848, the first Gold Discovery in California was made at Coloma, El Dorado County, only 21 miles north of GOLD BEACH.





Three Mile House, Placerville



Of the more than 500 towns that popped up like mushrooms during California's Gold Rush era, less than 100 remain today and of these only a few dozen combine the past with the present. Typical of these unique communities—and one that was an important stop in the Mother Lode Country—is Volcano, only a few miles from State 49 and its sister city, Jackson.



Old Time Sprinkler Wagon, Auburn

Frockhouse #1, Nevada City

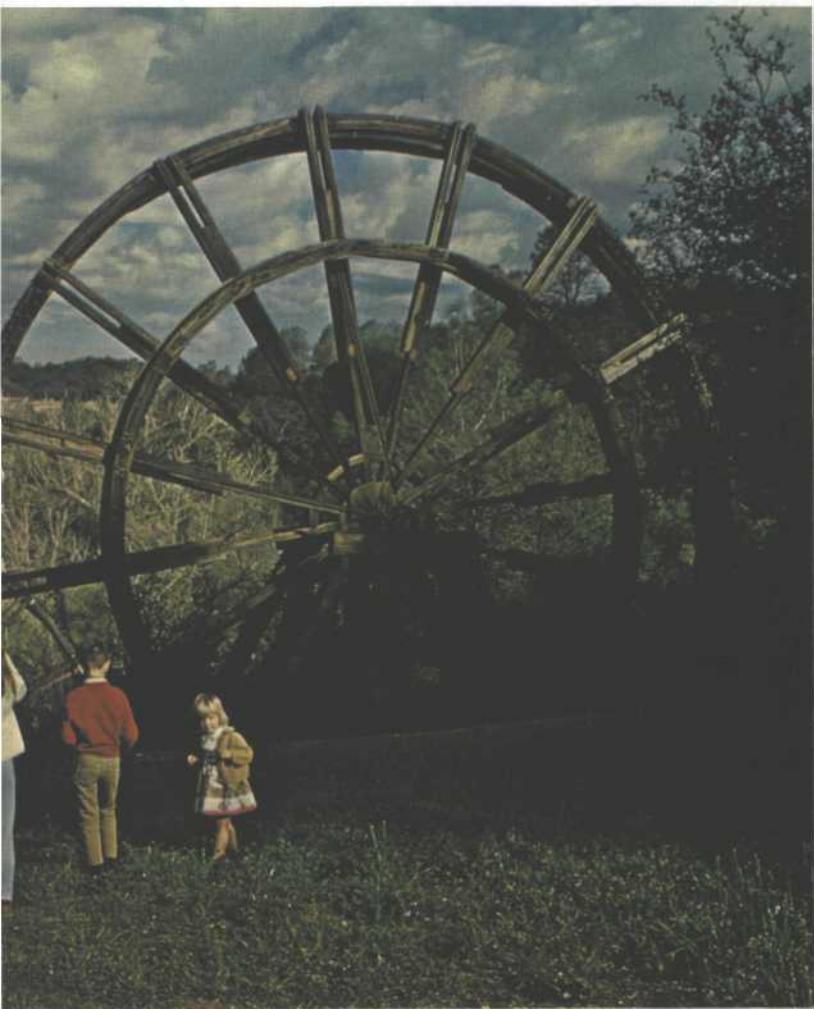
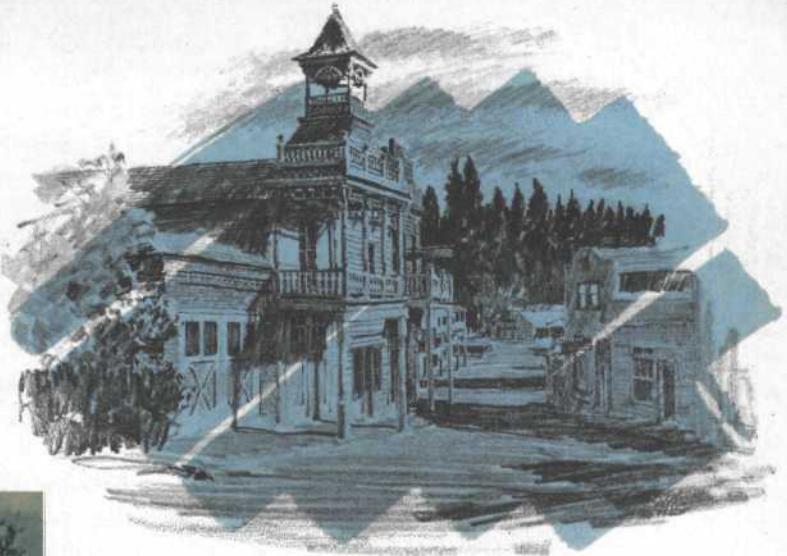
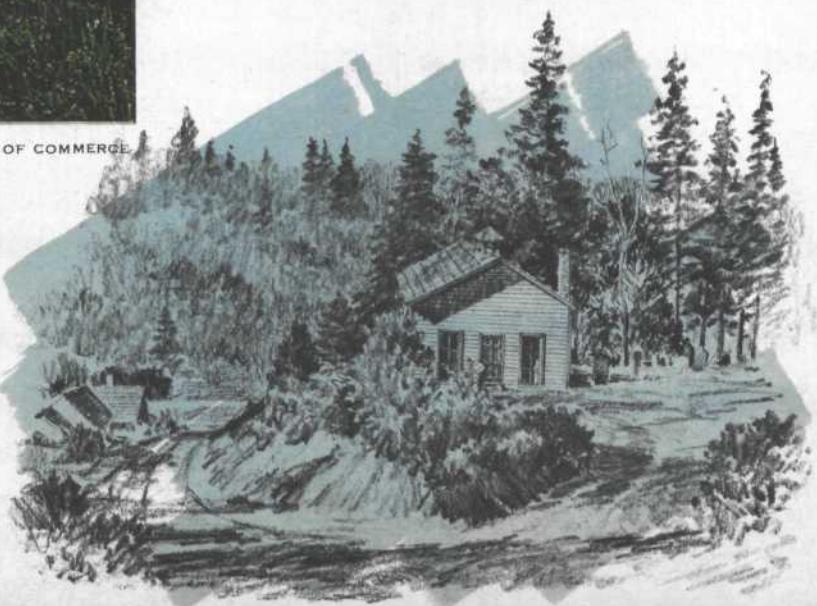


PHOTO COURTESY AMADOR CHAMBER OF COMMERCE

*En route from Jackson to Volcano
can be seen the famous wheels
of the Kennedy mine
which produced \$34,280,000
in gold. Its sister mine,
the Argonaut, produced \$25,000,000.*

Hangtown's First Church



VOLCANO

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In the heart of the Mother Lode country, the sleepy town of Volcano enjoys the enviable position of being far enough off the beaten path to retain all the rural charm this section of California has to offer.

continued



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The citizens of Volcano have maintained their standard of living without burying their historical past under the blanket of commercialism. There are no shopping centers with eye-sore acreage of blacktop parking lots, no modern business establishments with large windows glaring in the sunlight, and no motel complexes with neon signs advertising T.V. and heated swimming pools.

Volcano's small cluster of buildings convey the flavor of the gold rush days. It would come as no surprise to see a stagecoach suddenly roll into town and begin unloading passengers in front of the old St. George Hotel. The event would be just as much a part of the scene as the tall pines on the surrounding hills. Constructed in 1862, the three story brick hotel still provides lodging and meals for the traveler, and invites the visitor to "sit-a-spell" under vine-covered balconies.

A short distance up the street is the restored Adolph Meyer Cigar Emporium. Dating back to the 1850s, it now houses the Cobblestone Gallery. Laurence Hosmer and William Winkle, co-owners and contributing artists, have captured the spirit of the Mother Lode country in their paintings.

The town's General Store is next to the gallery. Built in 1850, it was originally two separate stores. A. G. Cassinell joined the buliding together in the 1860s,

and today you can still purchase anything from paint to pork-n-beans.

The next building along the cobblestone sidewalk is the Jug & Rose Confectionery. Built on the site of Buck Hucy's Saloon, it was formerly called the Stone Jug. The lamps, marble soda fountain and other furnishings are authentic of the 1860 period. Besides making the best old fashion sundaes you have ever tasted, they also serve a fabulous breakfast of sourdough pancakes, Canadian bacon, scrambled eggs and fresh fruit.

Nearing the end of the block, you will find the old assay office, its wood frame showing the scars of years of exposure. Built in the 1870s and operated by the Madera Brothers, it later became the local barbershop of Jack Giauinni. The picturesque structure with its old wallpapered interior is now the office of the *California Traveler Magazine*.

A few steps away from the assay office will bring you to the red, white and blue Eagle Bandstand, a bookshop history buffs will enjoy. Jock Thebaut, the proprietor, has a broad knowledge of California history, and the knack of making you feel right at home.

Other landmarks still standing are the Sibley Brewery, built in 1856, and the Adams Express Office constructed one year later. The I.O.O.F. and Masonic Hall is an impressive, two story structure that still uses coal-oil lamps for illumina-

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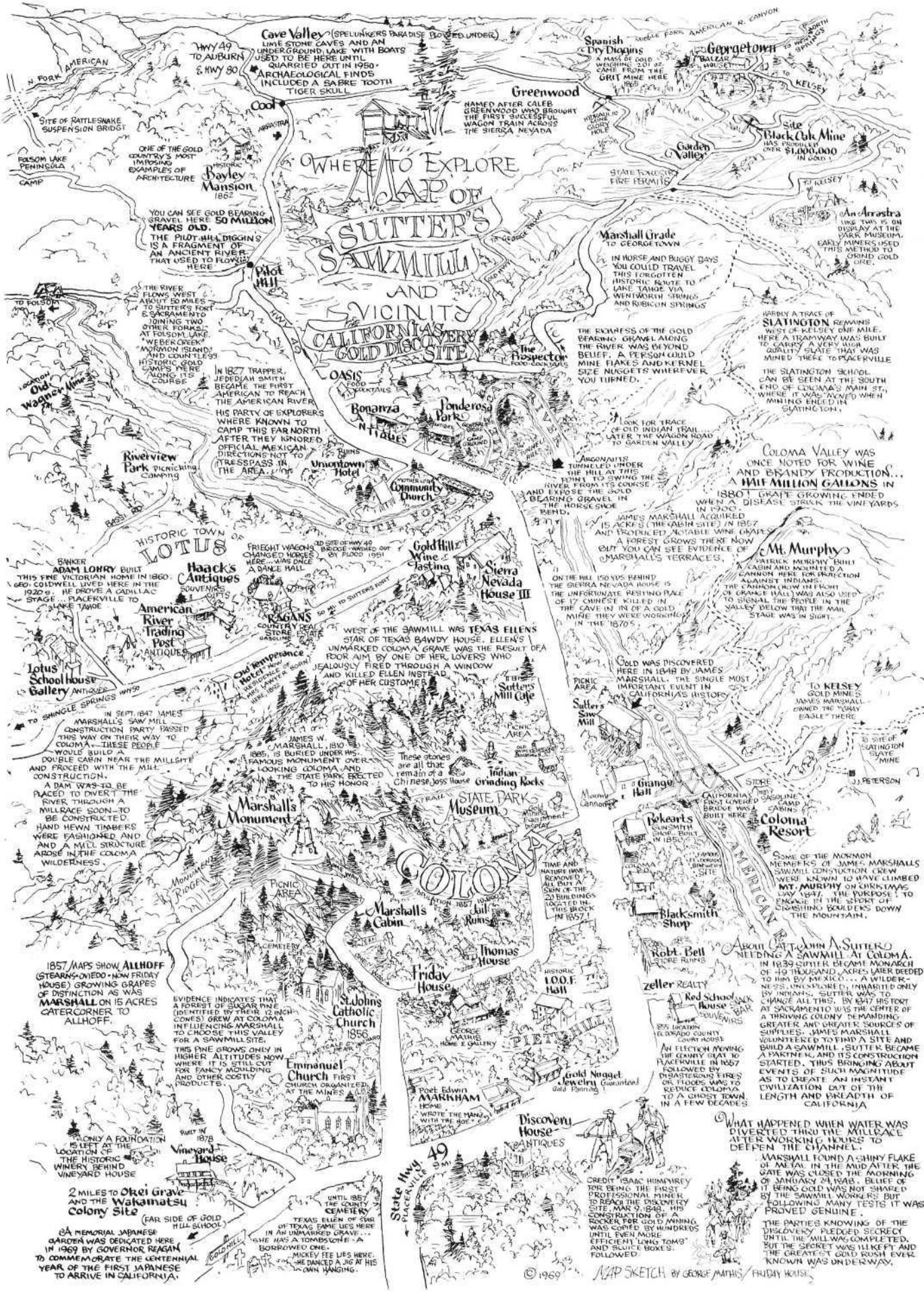


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tion. Across the street from the hall stands the jail, a small building with boilerplate sandwiched between its wooden 2x12 walls.

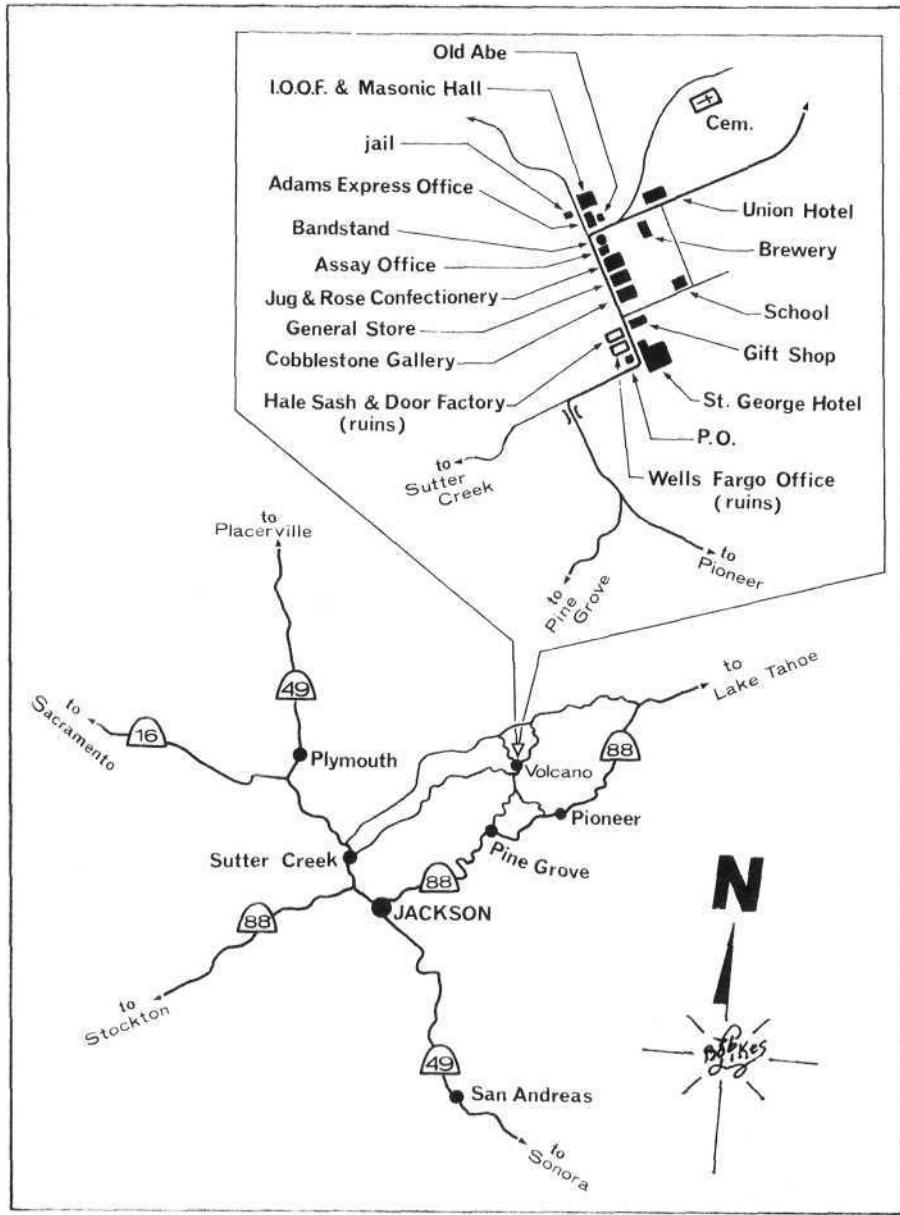
Volcano also has its ruins. The books of the Hale Sash and Door Factory are closed forever. The stone walls with their iron shuttered openings are slowly being destroyed as time and neglect take their toll. The Wells Fargo Building is not faring much better. A discarded safe inside the ruins recalls the richer and busier days of the past.

In order to appreciate the Volcano of today, you should know something about its past. Gold was discovered in 1848 by two soldiers of a party from Colonel Stevenson's New York 7th Regiment of Mexican War Volunteers. What they were doing there at that particular time

still remains a mystery, for Colonel Stevenson, in later years, made a statement that none of his men had ever been in the area. The fact still remains that two soldiers didn't survive the hard winter, and were buried the following spring by a group of Mexican travelers who discovered their bodies.

Lured with stories of \$500 from a single pan of gravel, it wasn't long before miners were pouring into the area. The young gold mining camp was called Soldiers Gulch, but as it grew, the name was changed to Volcano, possibly because of the crater-like valley in which the town was located, although this takes some stretching of the imagination.

By 1855, the rich placer deposits so easily panned from the streams were depleted, and the town turned to hydraulic



mining in the quest for gold. The population had grown from a few hundred to several thousand, but its growth was short lived, and by 1865 the gold was gone and Volcano was left a practically deserted town after producing 90 million dollars in gold.

These events are not unlike those of scores of other mining towns, and by simply changing the dates, you could probably make the story fit any number of them. But a closer look at Volcano's record reveals a noticeable deviation from the standard course of events that are usually associated with the rough and ready, sometimes violent, but always romantic history of the Mother Lode country.

The change begins to appear with a simple statement made in the 1860s by a traveler spending a few nights at the hotel. He noted that most of the men were congenial company, and some even played chess with wooden pieces that had been carved with their knives. It is also noted that Volcano had an unusual interest in the cultural side of life resulting in the first lending library and first little theater group in the state. George Madera, mining engineer, built the first astronomical telescope-observatory, and "Horn's Examiner into the Laws of Nature" was published in 1855 and was written by Professor George Horn of Volcano. Strange activities for a group of tough, whiskey drinking, pick swinging, adventurous people! The picture continues to change when we discover the story behind the 110-year-old bell that still rings in every 4th of July Celebration in Volcano.

At the outbreak of the Civil War, California had a choice of three roads to take: support the unknown candidate, Abraham Lincoln, for president; join the Southern States and take up their banner; or declare California an independent Republic and remain strictly neutral.

Thomas Starr King, the Unitarian minister and orator whose name became synonymous with that of Lincoln, was giving speeches throughout the state, urging the support of "Abe" Lincoln and the Union cause.

After speaking in Volcano, the miners and other citizens were so moved by his dramatic oratory they gave generously to the collection that night. So generously,

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in fact, Mr. King asked friends in Boston to send a bell to Volcano for the Methodist Church which had just been completed. On July 24, 1862, the following notice appeared in the *Sacramento Bee* newspaper:

"A cast-steel bell, med. size, manufactured by Naylor Vickers and Co. of Sheffield, England, was placed on the levee yesterday from the Schooner William McGill. The bell is destined for Volcano, Amador County."

This wasn't the only time Volcano stood up to be counted. Probably the most publicized incident to occur in Volcano surrounds a 6-pounder, bronze cannon affectionately called "Old Abe."

In 1863, Northern and Southern factions in the town were about evenly numbered and armed. The home guard unit, under the name of Volcano Blues, was determined their gold was going to the Union. The southern die-hards were just as determined to divert the gold shipments to the Confederate States. Upon hearing of a cannon that somehow ended up in a San Francisco wharf warehouse, seemingly abandoned, the Volcano Blues

lost no time in dispatching a rider to purchase it. The 800 pound cannon was shipped by riverboat to Sacramento, then hauled by freight wagon to Jackson where it was transferred to a hearse belonging to the Volcano undertaker. The horse drawn hearse departed Jackson and headed into the hills. Arriving in Volcano, the undertaker casually delivered his strange cargo to the rear of Goodrich and Adams blacksmith shop, where it was secretly reassembled and mounted. The Blues now had an "ace-in-the-hole" and felt the balance of arms power was in their favor should a showdown with the rebels occur.

Shortly afterwards, the Confederate sympathizers boldly held their first public meeting. The time had come to remove the only obstacle that would prevent them from taking over the town—the Volcano Blues. With an impressive show in manpower and arms, the large band of angry men began their march in the direction of the Blues armory. As the advancing Rebels approached the building, the doors slowly swung open, and out of the dark shadows rolled a sight that made

their blood run cold. With unbelieving eyes, the Confederates stared right down the loaded barrel of "Old Abe."

Both sides stood silently facing each other. The stillness was broken by the command "make ready to fire!" The Southern line wavered, but Confederate leaders urged them on. The cannoneer's torch was lowered. Suddenly the Southern lines broke, and dropping their arms, they fled the scene in disorder.

"Old Abe" was kept in view as a reminder that the Blues meant business, but as time passed and the initial shock wore off, rumors began circulating that the cannon was a bluff, and wasn't capable of firing. The home guard decided something had to be done before things got out of hand.

Many stores on the main street were owned by Southern sympathizers. With Union storekeepers notified, the cannon was loaded with black powder and wadded wet paper, then rolled into the position at the end of the street. On the pre-arranged signal, Union storekeepers closed the iron shutters over their shop

Continued on page 50

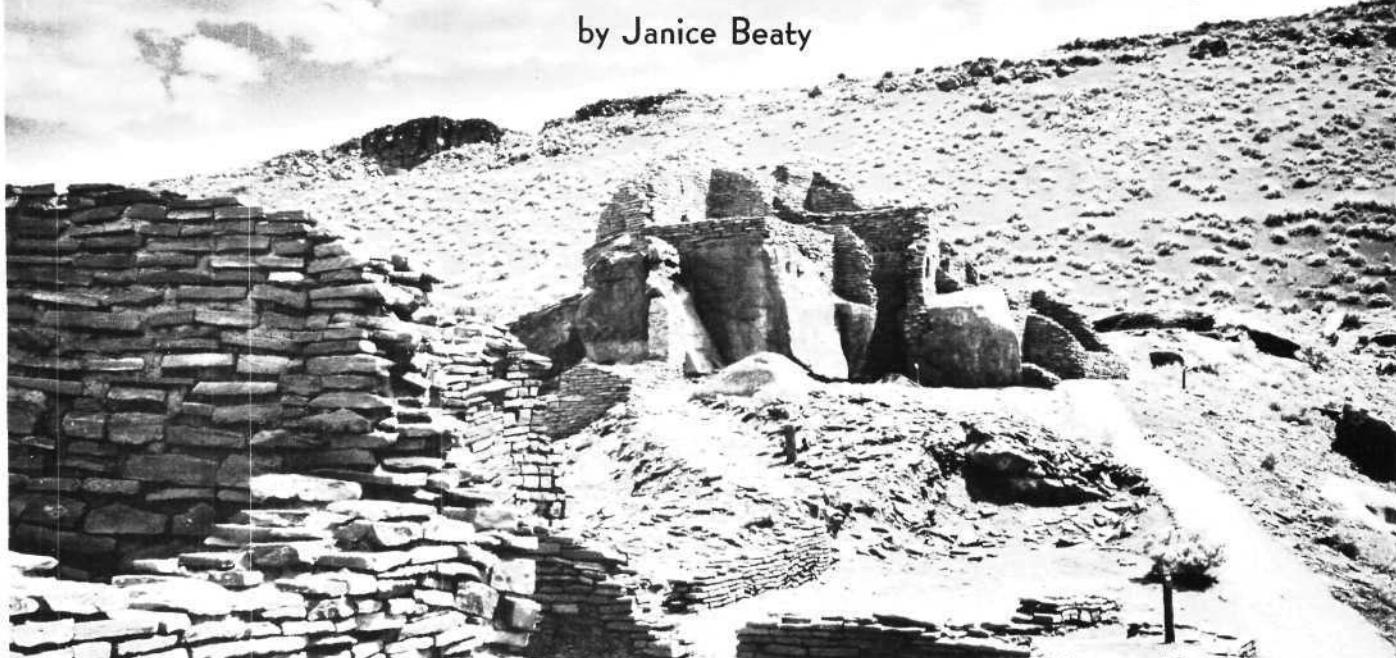
Constructed in 1862, the St. George Hotel still provides lodging and meals for the traveler.

Cobblestone sidewalks recall busier days when Volcano produced 90 million dollars in gold.



Tree Rings at Showlow

by Janice Beaty



Wooden timbers from the Wupatki ruins were removed in the 1920s to help formulate tree-ring method of dating ruins.

INDIAN RUINS in the Southwest have always attracted wide interest. Early settlers believed they were built by the Aztecs of Mexico, and gave them names such as Montezuma Castle. Archeologists later proved the builders to be Pueblo Indians—but the age of the ruins long remained a mystery.

In 1922 a new and exciting theory was advanced which seemed certain to solve this final problem. Led by Arizona astronomer, Dr. Andrew Ellicott Douglass, excavators attempted to date the ruins by counting the annual tree rings found in wooden posts and beams taken from the ancient dwellings.

It was a well known fact that trees added a new and distinctive layer of growth every year. Already the rings of California's giant sequoias had been counted back to 1000 B.C. Douglass believed that a similar calendar, stretching from living forests back to the oldest Indian ruins, might be formed if enough old beams could be found.

And so the search began. Hundreds of borings were taken from every available piece of wood. Giant stumps from old forests, buried logs from pueblo ruins, carved timbers from Spanish missions—nothing was overlooked.

By 1928 Dr. Douglass had a tree ring calendar stretching back to the year 1260

A.D. Still this did not solve the age question of the really old ruins. So the search for old wood was resumed—this time among the remains at Wupatki, Mesa Verde and Chaco Canyon.

The result was another, and entirely different tree ring calendar covering 585 years. This one was obviously much older than the first, but still there remained a gap of unknown length between the two. The search continued.

A reward was offered to anyone with a living pine tree more than 600 years old. None turned up. The two calendars were compared with California's sequoia dates. They did not correlate. Modern Hopi pueblos were searched. Often when a beam was bored, the Indians would insist that the "spirit of decay" be placated with a piece of turquoise placed in the hole. More often the Indians would not permit any boring for fear of offending pueblo gods.

In one such instance Dr. Douglass spent seven hours lying flat on his stomach on an old kiva floor, counting tree rings with the aid of a lens because boring had been prohibited—and all without success. The wood was too recent.

He finally decided they would have to find older pueblos—perhaps the place from which the Hopis had last migrated.

Four Arizona sites were suggested in early 1929: Kokopnyama and Kintyel in the Hopi Indian country and Pinedale and Showlow, 100 miles south. Early Hopi pottery had come from each of these locations.

At Showlow the wood from a buried Indian ruin appeared to be ancient, but it was mostly charcoal. The delicate pieces had to be dipped in paraffin and gasoline to prevent crumbling. As the ancient timbers and fragments were unearthed they were routinely labeled. One charred beam labeled HH39 showed some promise, so Dr. Douglass began the tedious examination.

Its outermost rings fit into the original chronology quite clearly, placing it in the 1300s when it was cut. Soon Dr. Douglass was counting its rings with rising excitement. Back, back, back they went until they corresponded exactly with the early chronology Dr. Douglass had formulated. This was the "missing link!" Like Egypt's Rosetta Stone, beam HH39 from Showlow was the key to unlocking the age mysteries of the Southwest's ruins. It clearly established an unbroken calendar from 1929 back to 1100 A.D. At last the prehistoric Indian ruins could be dated by "dendrochronology"—by comparing the tree rings from their wooden beams with Dr. Douglass's now-completed calendar. □



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The Lady Gambler

"SHE'S A MITE' pretty gal!" The old miner standing at the far edge of the crowd voiced the thoughts of all who had gathered in front of the hotel to watch the arrival of the stage from Sacramento. The year was 1854. The town was Nevada City, California. This small city of seven hills was still a rough mining camp that had originally been called Deer Creek Dry Diggin's, named for Deer Creek which still flows on the borders of the town.

The young lady who had stepped from the dusty Concord coach was a striking beauty. About twenty-five, she was dark of hair and eyes, had olive skin, and a lovely figure dressed in an elegant manner. She flashed a friendly smile as she went into the hotel.

"Her name is Madame Eleanor Du-

mont, and she's French." The hotel clerk divulged the information later with an important air. But where did she come from? And why was she there? The townspeople seethed with curiosity. They didn't need another schoolteacher; Eleanor didn't look like the "likes of a dance-hall girl," and no miner appeared to claim her as his prospective bride.

For ten days this apparently well-bred, well-educated young lady went her way in a quiet, self-possessed manner. She was friendly, but stayed close to the hotel and refused the many invitations offered by young men who had romance in mind.

Then appeared a handbill that shocked the town. It announced the Grand Opening of Madame Dumont's gambling house on Broad Street, where all were invited to enjoy free champagne, and try their

luck at *ving-et-un* (twenty-one), a game of cards, in which the player's cards must count closer to twenty-one than those of the dealer. A woman gambler was unheard of! Women had been known to deal occasionally—to serve as a "come-on." But to make a living at it? Unthinkable!

But the gala opening was well attended. Even those who did not gamble enjoyed seeing a pretty girl, for the ratio of girls to men was about one to seven in the small community. Long-forgotten good clothes were unpacked from trunks. Those who had no fancy duds shined their boots, trimmed their beards, put a poke of gold in their pockets, and headed for the party.

Madame Dumont charmed them all. She had a way of making each man feel



by
Marion
Holbrook

MADAME



COURTESY CALIFORNIA STATE LIBRARY

Nevada City, 1856

like he was her special friend just by her touch on his sleeve. But she allowed no familiarities. A lady with an air of refinement about her, she was treated as such. Though she rolled her own cigarettes with a deft hand and sipped wine while at play, cursing and drunkenness in her place of business was taboo. Most important, she was a good sport and knowledgeable in the ways of men and gamblers. "Zhee bhoys" were all her "frrens."

A shrewd player, she handled the cards with professional skill and took a good share of winnings for the house. But she made the losers feel she was sorry to have been the lucky one, and was quick to congratulate those who won from her. As a result, her place of business flourished and became the most im-

portant gambling house in the town. Miners came from bigger towns of Grass Valley and Rough and Ready to play at her table.

It soon became apparent she couldn't continue to handle the place alone and keep the business flourishing. A twenty-one dealer can't play against more than half a dozen at a time. Some of the men who frequented the establishment grew tired of waiting their turn and went down the street to Sam's Place, or to Jack's.

So Eleanor hired a gambler from the east. Ten years her senior, David Tobin had earned his living at the gambling tables most of his adult life. He was suave, personable and expert at handling the games of faro, keno and chuck-a-luck. In a short time it was necessary to enlarge the gambling parlor and to hire

more dealers. A small room was reserved for Madam Dumont's *ving-et-un* game, with the more prosperous frequenting her table.

Tobin was clever, but he was also greedy and it galled him to be working for a woman, and one younger than himself. In the fall of 1855, he demanded more money and a partnership. Eleanor refused him, so he departed for New York where he made a fortune in his own gambling house before he died ten years later.

Madame probably had let him go because she saw the dwindling of prosperity for Nevada City. The placer diggings were beginning to run out and easy money was a thing of the past. In the fall of 1856, she decided to move on.

continued

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When she had arrived in Nevada City, Eleanor Dumont was an unknown and had never divulged any information as to her background.

By the time she left she had become a legend—the West's only truly professional lady gambler—with a nickname she must have despised. A disgruntled gambler, having been divested of his day's earnings one evening, noticed the darkening line of Latin down on her upper lip and referred to her as "Madame Moustache." The name stuck and was to follow her the rest of her days in all of her travels.

Leaving Nevada City, Eleanor traveled from camp to camp, wherever men struck it rich. Never seeming to lose her youthful looks, and always beautifully gowned and jewelled, she appeared in many camps when they were at the height of their prosperity and excitement, and often remained there until they were almost deserted. She opened gambling halls in Nevada, Wyoming, Idaho and Montana. But the gamblers who frequented her table in the boisterous camp of Pioche, in Nevada, or in railroad-building construction camps where she appeared were much different than those in the settled community of Nevada City. Though she continued to call "Place your bets, gentlemen," the majority could not be classed as such. Most were rough and uncouth, often referring to her openly by her hated nickname.

"Madame Moustache" found those years hard. She was often rich, and often poor. When rich she was always ready with a helping hand to give someone a stake. When poor, she always managed to raise enough money to start anew. She had friends in every town.

For a time she lived in San Francisco, and history relates that she forgot she was a "lady" and lived up to the name of Madame. Then she decided, at age 38, to return to Nevada, buy some property and live the good, peaceful life. But two years later, lonely for real companionship, she met and married a small-town slicker. Trusting him, she gave him all her land and money. In a short while her husband had spent the money, sold the land and deserted her.

Once again, Eleanor Dumont moved from camp to camp and town to town, dealing *ving-et-un* and faro. Not as respectable as in her early days, she sometimes hired girls who enticed the customers to the second story, thus insuring that the miners would not spend their earnings elsewhere.

She reached Bodie in 1878. By now embittered and somewhat cynical, she was the only woman gambler there and still hailed as a "dead game sport who never welched on a bet." Down on her luck one day, she borrowed some money from a saloon keeper. "I'll pay you back on Monday," she said, "if I'm alive." That Monday her lifeless body was found beside a road with a pistol nearby. She had kept her promise.

On the morning of September 9, 1879, the Sacramento Union reported her death. Her only obituary appeared a year later in the official History of Nevada County, California. A brief sketch of her career closed with the phrase, "Let her many good qualities invoke leniency in criticising her failings." □

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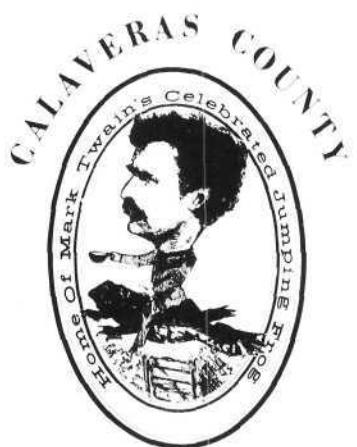
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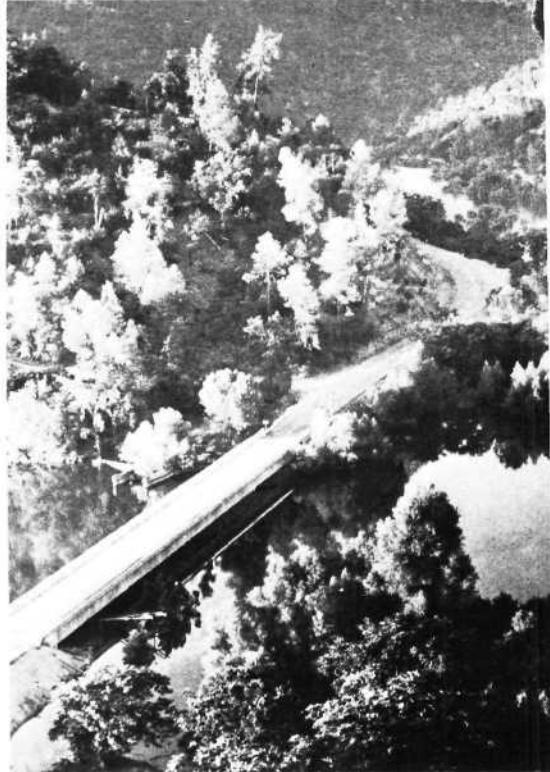
THE MOTHER LODE

Continued from page 24

At Angels Camp—named after Henry Angel and not an ethereal body which were fairly scarce in those days—be certain to stop at the Angels Camp Museum on the main highway. Once privately owned, it is now run by the City of Angels Camp and houses one of the finest rock and artifact collections in northern California. Its curators, Rick and Kitty Yarborough, are dedicated to their work. The museum is open every day of the week except Tuesdays from June through September and on weekends during the other months.

Angels Camp is also the site of the now world-famous Jumping Frog Jubilee held every May in connection with the Calaveras County Fair. The event, which draws thousands of people to the area, is the result of Mark Twain's famous story *The Celebrated Jumping Frog of Calaveras County*. The author wrote the story after hearing the tall tale from a bartender in a saloon in the community of Murphys, eight miles from Angels Camp.

Murphys is one of the many interesting paradoxes in the Mother Lode Country. It was founded by the Murphy brothers in 1848 and during the ensuing 10 years Wells Fargo shipped out \$10 million dollars in gold. But today Mur-



phys shouldn't be called Murphys. It should be named after a town in New England.

In contrast to the harsh stone buildings of other Mother Lode towns in the area, Murphys is a quiet village with a shaded main street and a Bostonian-type church on the hill above. Wooden frame buildings housing art and gift shops line its two-block main street.

The Murphys Hotel (it could be called the New England Manor) was built in

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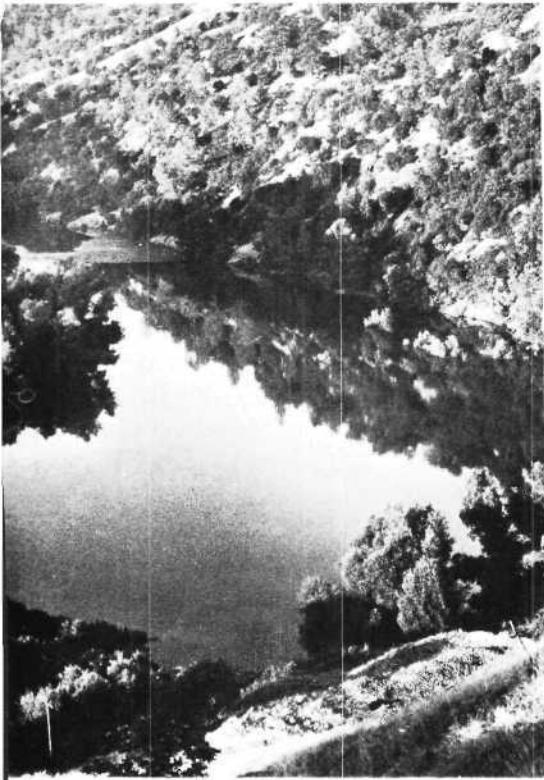
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Gene and Frances Savaria



One of the scenic views along State 49 is this one at the Stanislaus River and the once booming town of Melones.

1855 and is in active use today, along with a new motel adjacent to the hotel.

When you sign the hotel guest register your name will be included with such guests as General U. S. Grant, Mark Twain, Horatio Alger Jr., Bret Harte, J. Pierpont Morgan and Charles Bolton. The latter was better known as Black Bart, the gentleman stagecoach robber.

Returning to Highway 49, the road goes through San Andreas, county seat of Calaveras County, and to the modern community of Jackson where the lumber industry has replaced gold. From here a side road goes to Volcano. See article on Page 26.

continued

MORE MOTHER LODGE COUNTRY ADVENTURES

Other exciting adventures and articles delving into the legends and history of the Mother Lode Country are contained in back issues of Desert Magazine. Bill Moyle's Lost Mine, July '65; Hornitos, California, August '65; Mokelumne, California, Dec. '65; Joaquin Murieta and Did Pegleg's Gold Belong to Peralta?, June '66; Little Charlie's Lost Placer and The Glory of Columbia, October '66; Chinese Camp, May '67; Scarcity of Angels and

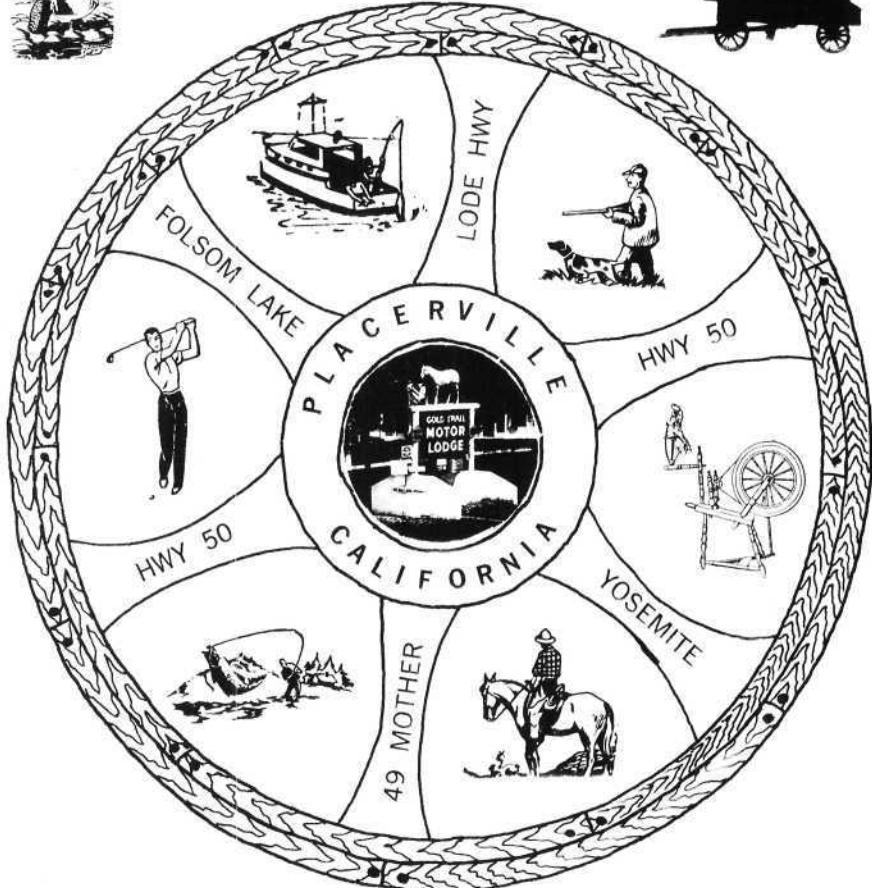
Lost Souls of Moaning Cave, July '67.

Also: Knight's Ferry and Greenhorn's Luck, June '68; Carson Hill, July '68; Golden Melones, Oct. '69; Gold Discovery Days, Sutter's Fort and Copperopolis, Jan. '69, Johnsville, Ghost of a Golden Era, July '69.

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Originally called Dry Diggin's, the name was changed to Hangtown in 1849 after a series of brutal lynchings. But by 1854 law was restored and the community was renamed Placerville.

One of the most populous of the early mining communities, Placerville did not die when the other Lode gold diminished. When gold and silver were discovered in the Nevada Comstock in 1859 and miners deserted the Mother Lode Country by the thousands, Placerville became the jumping off place for the new bonanza.

Today it still serves as a jumping off

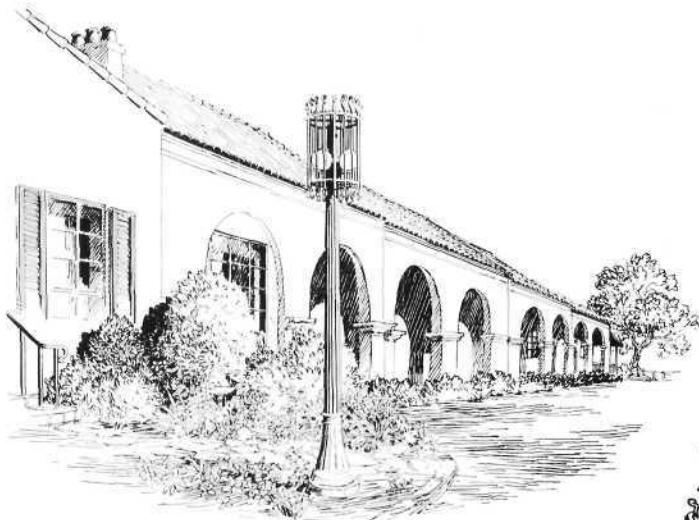
place for tourists headed for the surrounding recreational lands and for the lumber and agricultural activities which have replaced the gold economy.

Nine miles north of Placerville is the state park of Coloma, site of Marshall's famous discovery which started the California Gold Rush. From Coloma, State 49 continues north to Auburn, Grass Valley, Nevada City and Downieville.

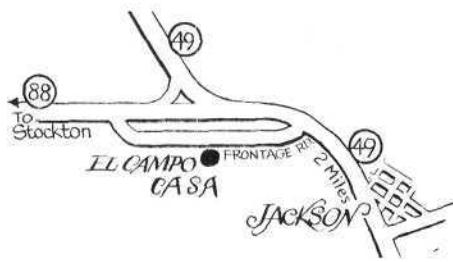
Although my trip ended at Downieville, I was reluctant to leave the sanctuary of the Sierra Mountains and return to the freeways and civilization, so I retraced my route south and reached Chinese Camp in the early evening. Taking a side road up the hill I discovered a small church and cemetery which overlooked the village below.

There were about two dozen graves in the cemetery surrounding the padlocked St. Francis Xavier Catholic Church. All designated the occupants as former natives of Ireland. One of the inscriptions read:

"Sarah Goodwin, Born Feb. 11, 1828,
Died Nov. 11, 1898. Native of County
Tyrone, Ireland."

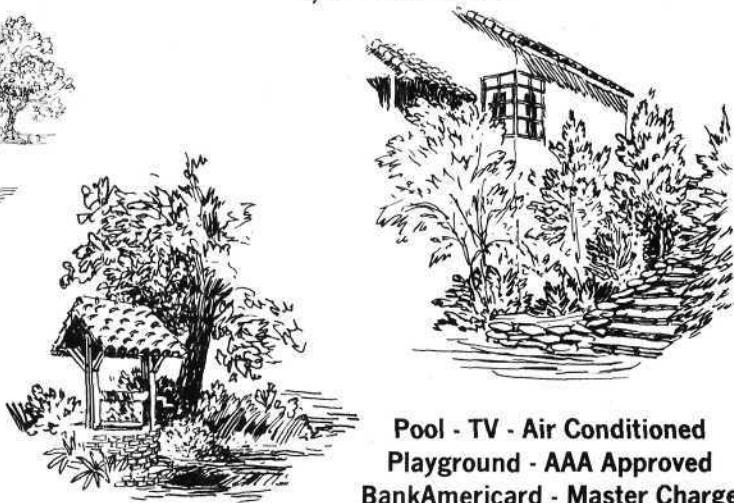


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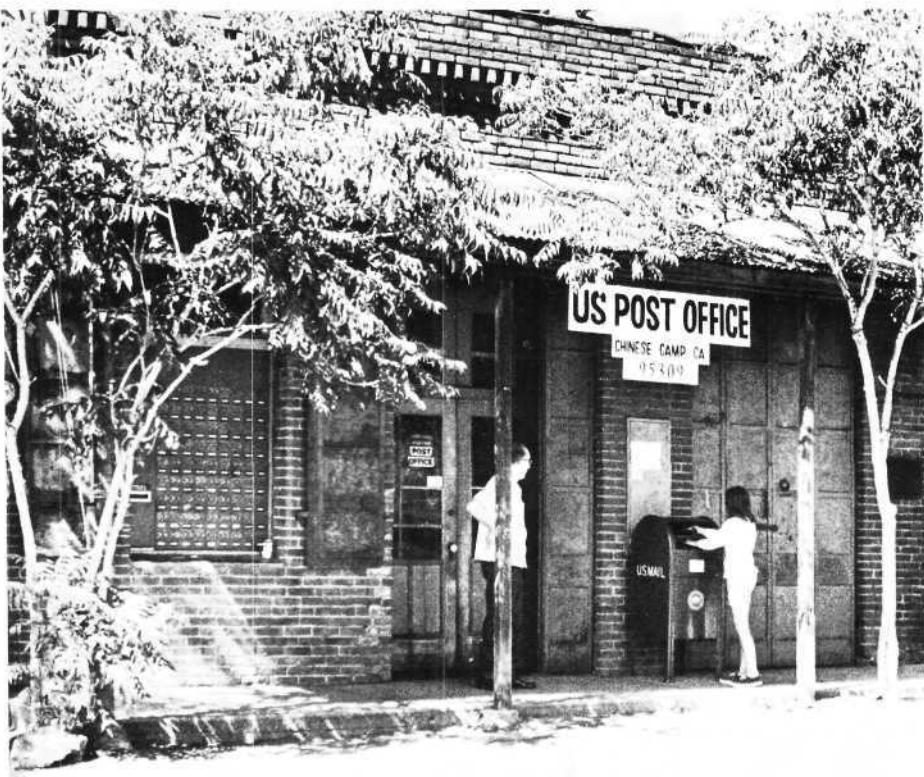
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Established in 1854, the post office at Chinese Camp—one of the most colorful and "wicked" towns in the Mother Lode—is still in use today. The post office and other old buildings are shaded by Chinese Trees of Heaven.

I watched the tourists a few hundred feet down the hill wandering under the delicate leaves of the Chinese Trees of Heaven which surround the post office and the old Wells Fargo building where more than \$10,000,000 in gold was handled.

During its heyday there were 5000 Chinese living in Chinese Camp and a total of 25,000 in the Mother Lode Country. Looking at the graves in my cemetery with the Irish names, I wondered where the Chinese were buried, or what had happened to their ashes after they were cremated.

As I listened to the wind whispering through the branches of the giant oak trees, I knew my question would never be answered—nor would many others because the Mother Lode Country cannot be captured with facts and figures alone.

It is a land of shadows and moods, a land of harsh reality and subdued colors, a land of the past and of the future a land which changed the history of the western world and which even today stands defiant and immutable—a challenge to modern day Argonauts—a land of the legendary Golden Fleece. □

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Vasquez Rocks

by Helen Walker

THE OUTLAW, Tiburcio Vasquez, and the recreation area, Vasquez Rocks, have one thing in common—both have seen violence in their lives. Tiburcio Vasquez, was romanticized as a famous outlaw of his time. His exploits of horse thievery, stagecoach robberies, murder and pillaging, during the mid 1800s; gained for him a reputation unequalled in the colorful era of California Mexican-American history.

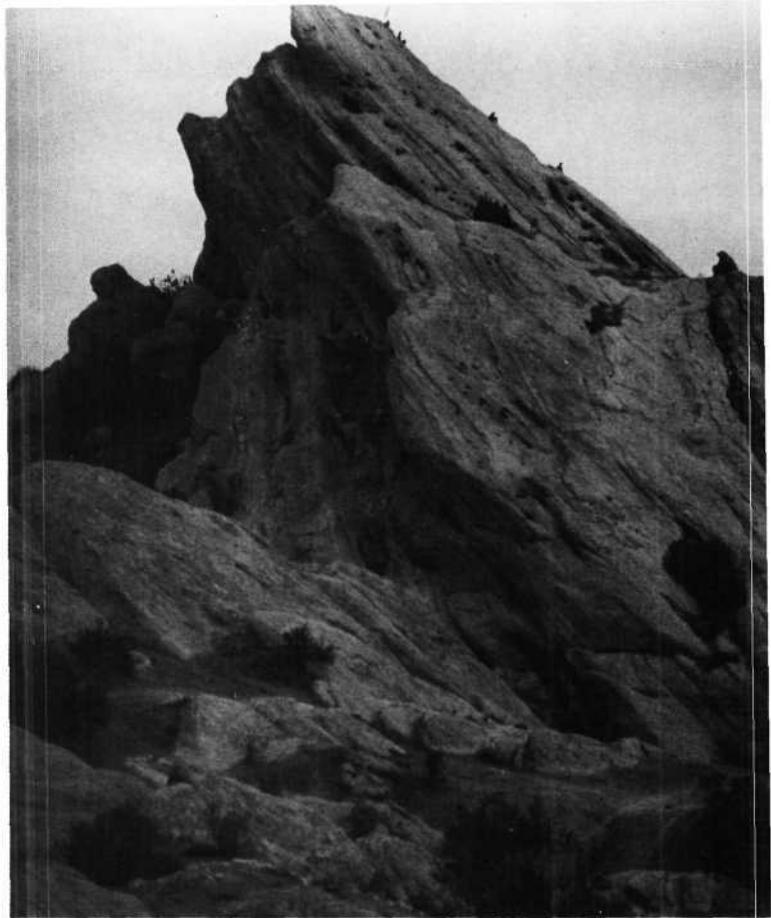
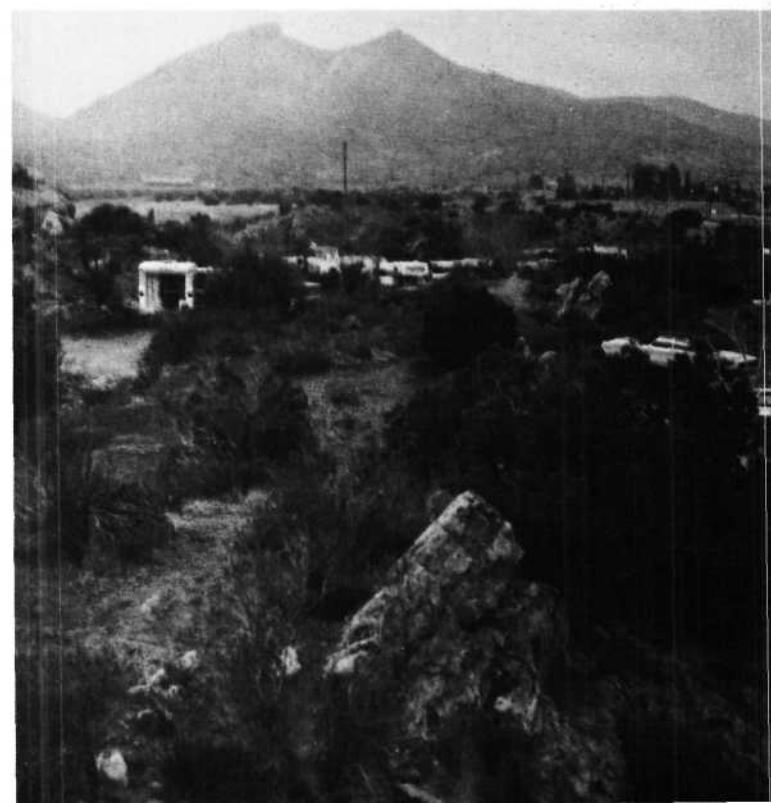
Vasquez Rocks Recreation Area, on the other hand, saw its violence some 25 to 50 million years ago. Its strategic location in the Antelope Valley, along a tributary of the San Andreas Fault, has been responsible for the disturbance and unrest that it has witnessed. In the early forming of the earth's crust, earthquakes slit open the land along the fault lines, at the same time expelling boulders skyward to heights of 200 feet, and more. Their creation served a two-fold purpose —nature acquired a spot of unusual beauty, and Vasquez, the outlaw, found them an excellent hideaway when the posse was close at his heels.

Tiburcio Vasquez was born in Mon-

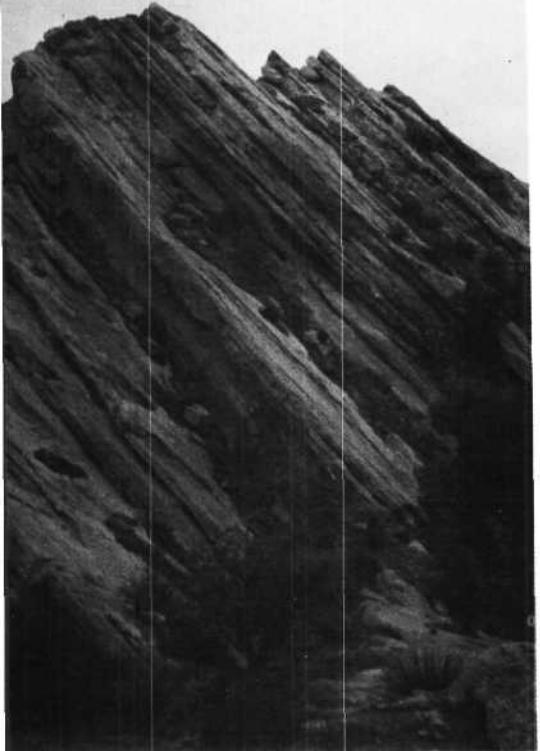
terey, California, in the year 1835. The white adobe home where he and his family lived in quiet respect still stands in back of the Colton Hall in Monterey. Along with his three brothers and two sisters, Tiburcio attended school—where

his accomplishment of reading and writing, became a point of much pride to him. However, during his early teens, he fell into the company of a group of unsavory characters. Among them was the noted Anastacia Garcia whose reputa-

Intimate camp sites are set among the rocks and protected from the wind, providing atmosphere and privacy.



Thrust up along the San Andreas fault line, the massive rocks reach heights of 200 feet. The strata is almost vertical and dwarfs the young climbers. Photos by John Walker.



ten of his escapades, tell of his habit of abducting the women he fancied at the moment, carrying them into the hills, then abandoning them when they no longer pleased him. However, one of his captives outsmarted him — Anita, his hood sweetheart.

During their early courtship days, this young woman had tried, with her love and influence, to win Vasquez away from Garcia and his unscrupulous ways. She did not succeed, and Vasquez left her behind and pursued the life of banditry.

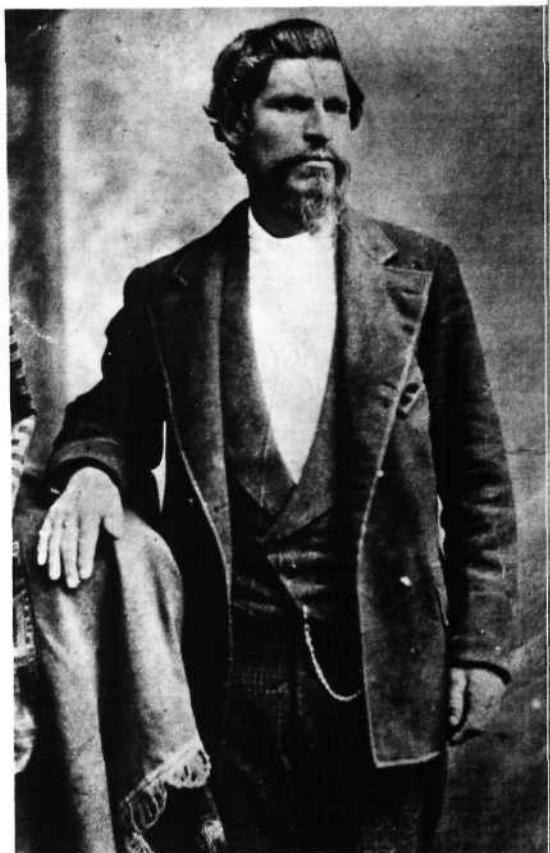
The memory of Anita was not easily dispelled from his mind. What Vasquez wanted—Vasquez got! He swept down upon Anita's rancho and abducted her. The life of being Vasquez's woman in the outlaw camp, inflicted hardships on Anita, and she made several unsuccessful attempts at escape. Margurita, a woman companion of Garcia and jealous of Anita's beauty, volunteered to help her escape. Three Americanos, who had recently joined the group, offered to assist the two women and to capture Vasquez and reap the reward. The capture of both Vasquez and Garcia was successfully carried out. However, en route to Monterey, Anita had a change of heart.

She begged for the release of Vasquez who, she claimed, had not really done her any bodily harm. Vasquez and Garcia were both given their freedom, and the two women continued their journey to Monterey with the three Americanos. The two women rested at Anita's rancho where, in fear of their lives from the resentful outlaws, they arranged to have the Americans keep watch on the house. Garcia alone followed the expected pattern, and returned to reclaim Anita for himself—much to Margurita's dismay. Vasquez made good his escape.

Vasquez continued his exploits during his 39 years of life, before being hung in San Jose. During his notorious career, he was praised by the Indians and some of his people—who shared his loot, and devoured the meat from his rustled cattle and sheep. He had a gnawing dislike of the Yankee, whom he felt had made his way by pushing aside those of weaker spirit. He felt his people had been dis-

criminated against, and he was ready to fight in defense of his feelings.

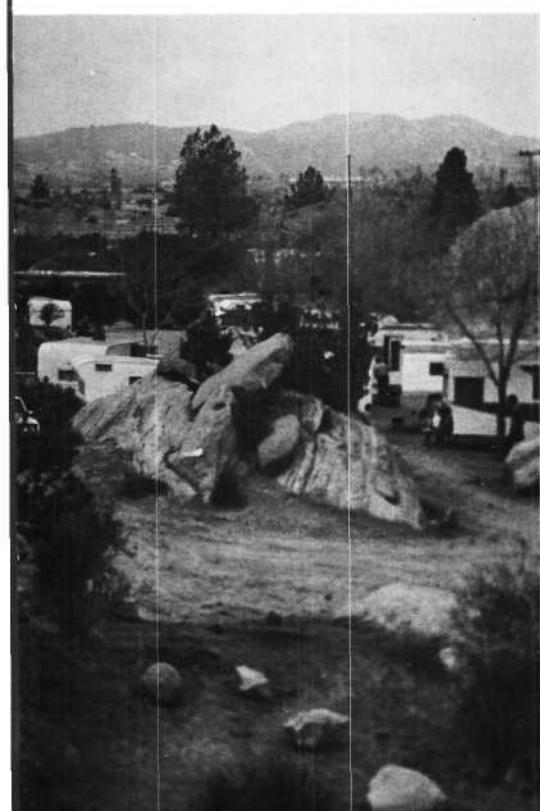
Today Vasquez Rocks still sees the outlaw and hears the report of the six-shooter. Only now it is all done in front of cameras for our entertainment on TV and movies. Lancer, Bonanza, and many other popular westerns are filmed among the backdrop of Vasquez Rocks.



Tiburcio Vasquez was one of the most colorful of the famous bandits of California's Mexican-American history.

Camping and overnight facilities are picturesquely spotted in among the rocks. Because of the growing popularity of this park, additional land has been acquired, and the 700 acres of space has been enlarged.

Vasquez Rocks Recreation Area is first viewed from the new Antelope Valley Freeway. Take the turn-off ramp at Agua Dulce Canyon Road, and from there signs will lead you to the entrance. You will find it just an easy hour's drive from Los Angeles—a good spot for your picnic, hike, or overnight campout. □



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Rambling on Rocks

by Glenn
and Martha Vargas

LAST MONTH we told you, in a very general way, how petrified wood was formed. We did this without telling which minerals are responsible for the stone part of petrified wood. The two methods described both call for some mineral being injected or infiltrated into it.

In the June issue, we discussed the methods by which agate is formed in seams, veins, and other subterranean openings. Obviously, the porosity of the wood, the amount of decay that has previously taken place, and other factors have an influence on the rate the mineral finds its way into the wood, and completely infiltrates it. As agate is common, and found in many different formations, it can easily be assumed that wood preserved by agate is common. This is very true.

In the July issue, we discussed opal and its occurrence, and stated its formation was parallel to that of agate. We mentioned opalized clams, etc., that are to be found in a fossil bed. Petrified wood is in a true sense a fossil. Most of the petrified wood known to the rock-hound is either agate or opal.

At this point we must mention the color of petrified wood. If we understand wood as a fresh material has very little color of its own, and after being buried, it will usually turn very dark brown in color, then the wood itself cannot account for the wide variety of colors known in petrified wood. It must be remembered that wood as it is ordinarily known, is lighter than water, and thus floats. This is due to the large amount

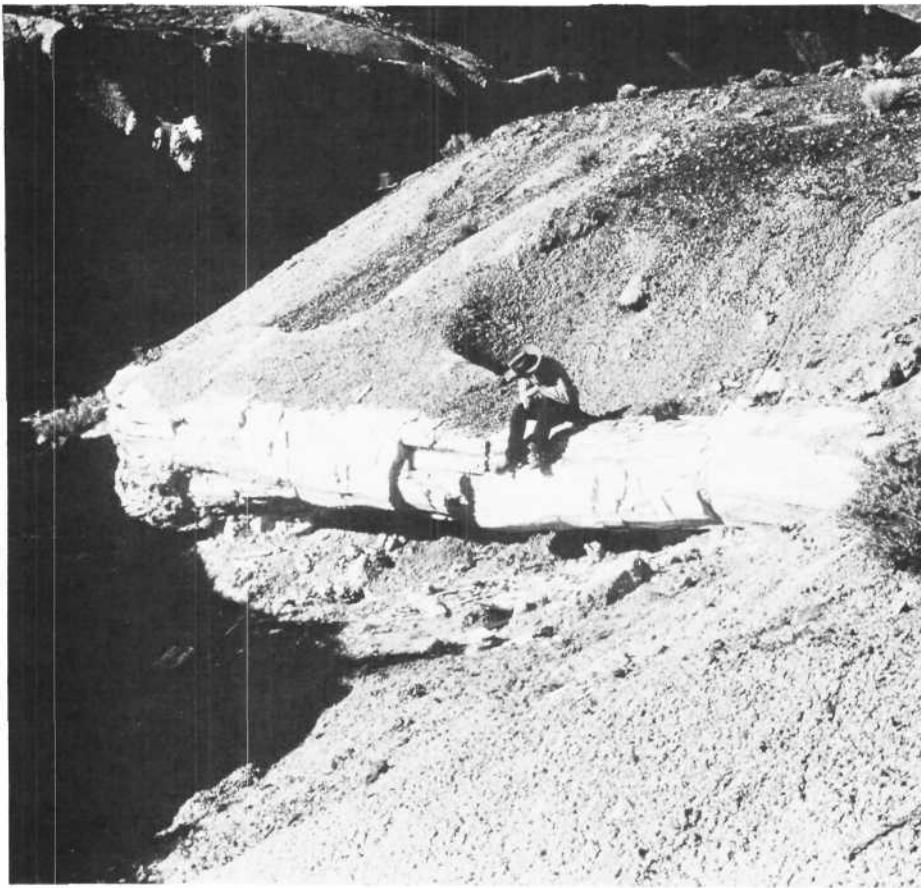
of trapped air in the individual cells. Petrified wood, on the other hand, is much heavier than water, and its bulk is well over 75% stone. Obviously then, the color or colors of petrified wood must be due to the color of the preserving material. Both agate and opal in their pure form are close to colorless, and petrified wood is sometimes found in this form. Again, as we noted in a previous column, both agate and opal are prone to contain many impurities, and thus a wide range of color patterns. Petrified wood falls into the same situation.

We must mention the petrified wood of the famous national park in Arizona. The preserving agent there is jasper, which is simply a very impure agate. Thus we can account for the highly colored petrified wood to be found there. There are very few other places in the world where material as highly colored is found. What are the mineral impurities that account for the colors? The reds—which are plentiful in Arizona wood—are due to hematite, the red oxide of iron. The browns and yellows are due to limonite, or one of the other brown oxides of iron. Black is probably due to pyrolusite, a black oxide of manganese. The other colors that appear in lesser amounts are not as easily identified.

Arizona petrified wood is commonly called "picture wood" because of the pattern of these colors. The black portions many times take on the outlines of hills, trees, etc. Much of this deposit is still in private hands, and some of this material reaches the market. Many of the logs of the Arizona wood were partially hollow at the time of infiltration, and these are often lined with amethyst (purple quartz) crystals. This type of thing makes a superb specimen, and are sold at high prices.

The color of opalized wood, found in copious amounts in the states of Nevada and Washington, as well as others, is much the same as jasperized wood. As a rule, however, reds do not usually appear in opalized wood. There is a location of opalized wood in Nevada to which we shall devote an entire column.

Agate and opal are not the only minerals involved in petrified wood. Almost any mineral that will dissolve in hot water, and be transported and injected into fossil beds, will do the job. This includes calcite, barite and others.



Preserving agent of the petrified wood in Arizona's famous national park is jasper, which is an impure agate and accounts for the highly colorful specimens.

Many of these are colorless minerals. They are usually soft, breaking with ease, and thus do not produce petrified wood of beauty or durability. A partial exception to this situation was a log we saw taken out of a copper mine in Utah. The preserving mineral was malachite. The copper mine is interesting in that it is a fossil bed that had been injected with copper-bearing solutions. There are bones and shells to be found in the mine, and it was only natural to find a piece of wood preserved with beautiful green malachite. The log had partially decayed previous to injection, and it was a breathtaking sight to look down this hollow log with its velvety green lining.

Extensive decay accounts for another part of this story: wood casts. These are filled by the same methods as above, but call for the complete or nearly complete decay of the wood previous to injection. Here, the wood may not have been deeply buried, or for some other reason oxygen was not completely excluded. The trees may have been overwhelmed by a lava flow, and completely burned away after the lava hardened.

After either of these possibilities, all that remained was a mold of the former piece of wood, faithfully complete with all surface details such as bark, knots, and even cracks. The subsequent filling, usually with agate, is now a perfect cast or replica of the wood. The agate may or may not have color inclusions, and surprisingly it commonly does not. Usually, the agate of wood casts is the banded form known as fortification, or some type of moss agate. Unless the surface texture of the wood cast is of interest, it is usually treated like any other form of agate. We will continue our discussion of petrified wood in next month's issue. □

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Woman's Viewpoint



WHEN CLUSTERS of elderberries turn purple and tight green pine cones begin to open, you know harvest time is approaching. In the high country it's time to pick wild berries for a batch of jam, and gather mint before the snow flies.

Thanks to you readers, we have a page full of recipes using the West's natural vegetation. Many of these recipes probably were prepared a century ago when the pioneers of our area had to depend on the land for food.

A change from the usual potatoes or rice is this tasty nutritious side dish.

BARLEY & PINENUT CASSEROLE

- 1 cup pearl barley
- 6 tablespoons butter
- 1/2 cup pinenuts
- 1 medium onion chopped
- 1/2 cup minced parsley
- 1/4 cup chives
- 1/4 teaspoon salt
- 1/4 teaspoon pepper
- 2 4-oz. cans beef broth

Rinse barley in cold water. In frying pan heat two tablespoons butter, add pinenuts, and cook until toasted. Remove nuts from pan, set aside. Add remaining butter, chopped onion, drained barley and cook, stirring until lightly toasted. Remove from heat and stir in other ingredients except broth. Spoon into 1 1/2 quart casserole. Heat broth until boiling; add to casserole. Stir lightly. Bake uncovered in 375° oven 1 hour and 10 minutes.

Norma Eardley,
Salt Lake City, Utah.

Several readers sent jam recipes. Rather than list each one separately they will be described as one:

WILD FRUIT JAM

(Elderberry, ground cherry, blackberry, gooseberry, and currant)

Wash fruit; partially crush in large kettle; heat slowly until juice flows freely; boil until about half of juice has evaporated. Measure fruit, add 2/3 cup of sugar for each cup of fruit. For a less seedy jam, sieve part of hot fruit before adding sugar. Boil rapidly to jelly stage (220°F.), stirring occasionally. Lift spoon from kettle and pour contents back into kettle. At first the jam will pour like water; later the drops flatten out into a thin sheet. When the jam reaches the finishing point it will shear away from the edge of the spoon leaving it clean. Pour jam into dry sterilized glasses, filling to within 1/4 inch of the top. Cover jam with a thin layer of hot paraffin.

*Contributed by Hallie Cooper,
Elaine Dollings,
and Maxine Rogers.*

WILD BERRY SYRUP

(Made from jam)

- 2/3 cup jam
- 2 teaspoons water
- 4 tablespoons brown sugar
- 1/8 teaspoon each nutmeg, cinnamon

Stir ingredients over a medium heat until well combined, bring to a boil and remove from heat. For a husband-pleaser put two tablespoons of crumbled bacon in the center of a hot, buttered pancake; roll it up, and pour on the hot wild berry syrup. My daughter, Valerie, brought this recipe home from her home economics class.

MINTED LIME COOLER

- Mint leaves
- 1/2 cup boiling water
- 1/2 cup fresh lime juice
- 1 pint lime-carbonated beverage
- 4 drops green food coloring
- Sugar to taste
- 1-1/2 cups water

Crush mint leaves in cup with spoon and add boiling water. Let set. Combine fresh lime juice, water, coloring, and sugar. Pour in mint water (not leaves) and chill several hours. When ready to serve, add lime-carbonated beverage. Pour into chilled glasses filled with crushed ice. Garnish with maraschino cherries, wedge of lime and fresh mint leaves. Yield: 6 servings.

Margaret Hendrix,
Sacramento, Calif.

PRICKLY PEAR CACTUS JELLY

- 1 cup prickly pear juice
- 1/4 cup lemon juice
- 3 cups sugar
- 1/2 cup pectin

Crush prickly pear fruit, cover with water and boil about one-half hour. Strain in cloth bag. Mix juice with sugar. Bring to boil quickly. Add pectin, boil hard for one-half minute. Remove from heat. Pour into glasses and seal with paraffin.

Fran Jennings,
Austin, Texas.

Joleen A. Robison

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Letters to the Editor



Letters requesting answers must include stamped self-addressed envelope.

New Roads . . .

I want to tell you how much I enjoy Desert Magazine. Since I have seen most of the "big places" in the West, I find it most interesting to take some of the back country roads mentioned in Desert and have found them most rewarding.

Last fall we went noodling for opals at Denio—having read about it in your magazine. This month we went to Kodachrome Flats (Chimney State Park) Grosvenor Arch and Old Paria after reading Ronald Shofner's *Through Utah's Back Country* in the May '70 issue. We expect to take some friends with us when we revisit this delightful area.

FRANCES E. McCLELLAND,
Seal Beach, Calif.

Big Mouth . . .

I enjoyed reading the article by K. L. Boynton on the *Desert Big Mouth* in the July '70 issue and gained from it additional information about the poorwill.

I thought you and the author would be interested to know that my husband, while collecting cacti for the Arizona Sonora Desert Museum, found a hibernating poorwill beneath an agave in the Silverbell Mountains near Tucson. Mrs. Thornberg, an authority on birds, studied the hibernating bird, and wrote an article which was published in an issue of *Condor*.

MRS. BETTY BLACKBURN,
Tucson, Arizona.

Litter Animals . . .

This past week we made our first camping trip of the season to our favorite spot—the Hidden Valley campground in Joshua Tree National Monument. There we saw the result of what must be the filthiest litter bug of all time. He had emptied his holding tank all over the camping grounds.

I know there is nothing that can be done unless there are witnesses to such things, but to those of us who regularly clean up other's messes, this takes the prize. We only hope the next time he does it when someone is watch-

ing so they will take his license plate number and report him to the park authorities.

MRS. CHARLES WOOD,
Bloomington, Calif.

Editor's Note: As we have constantly stated, the only way to stop these filthy animals as they destroy the desert, is to take down their license number and then immediately go to the nearest ranger station and report the violation so they can be arrested before they sneak away. We urge readers to send us letters describing these depredations so others will become aware of the problem.

Tortoise Tactics . . .

After reading K. L. Boynton's *The Tenebrous Tortoise* in the April '70 issue, I wonder if he can give me some information. I have had a desert tortoise for 20 years. I would be interested as to whether or not Mr. Boynton thought my tortoise could adapt to his original habitat if returned to the desert?

MRS. F. PROESCHER,
San Jose, Calif.

Editor's Note: Mrs. Proescher's letter was forwarded to Mr. Boynton and here is his reply which might help other readers who have tortoise pets:

When an animal is returned to a habitat natural to him, he still faces a great many more hazards than the same kind of animal who has lived in the place all the time.

While food finding might not be a problem if you returned the turtle in the Spring and to a favorable area, he would be much more subject to predation and temperature troubles, than the local turtles. He would be without a "home," for the one he was accustomed to for so long would be gone. He would have to have shelter from enemies and from day heat and night cold, which would mean getting right on with digging a den. But first, he would have to become acquainted with the vicinity—a delay greatly increasing his hazards. In time, if all went well, he would have to learn before winter, where the communal hibernating dens were.

These turtles are also pretty good "homers." While trudging back to San Jose and up to your door would be out of the question, there could well be a period of attempt to find his accustomed home. This would further delay settling in, and further expose the animal to hazards.

Life would be tough for your old friend. Besides, after all this time, how could you do without him?

Masterpiece . . .

David Muench's photograph of the bristlecone in the July '70 issue was a masterpiece of design and color. Enclosed is a check for six more issues so I can frame the photograph and give them to my friends.

BILL JOHNSON,
Venice, California.

Calendar of Western Events

This column is a public service and there is no charge for listing your event or meeting—so take advantage of the space by sending in your announcement. However, we must receive the information at least two months prior to the event. Be certain to furnish complete details.

AUGUST 21, GOLD RUSH TERRITORY DAYS opens the 117th session of the Fantastic California State Fair, Sacramento, Calif. The five-hour event includes all types of activities popular when the miners invaded the Mother Lode Country.

SEPTEMBER 19 & 20, SECOND ANNUAL ALL-INDIAN POW WOW, Yucca Valley, Calif. Parade, Indian dances and ceremonials, displays and dances. Proceeds to go to the Hi-Desert Memorial Hospital. Write to Hi-Desert Memorial Hospital, P. O. Box 638, Yucca Valley, Calif. 92284.

SEPTEMBER 20, FRESNO GEM & MINERAL SOCIETY'S Annual Rockswap, Oak Knoll A in Kearney Park, Fresno, Calif.

SEPTEMBER 26 & 27, NORTH AMERICAN ROCK AND MINERAL Annual Show, 5353 West Imperial Highway, Los Angeles, California.

OCTOBER 2 - 4, AMERICAN INDIAN & WESTERN RELIC SHOW & SALE, Great Western Exhibit Center, 2120 South Eastern Ave., Los Angeles. Antique and modern Indian arts and crafts, artifacts and collectors' pieces, Western Americana, Pre Columbian and Alaskan items.

OCTOBER 3 & 4, HARVEST OF GEM SHOW sponsored by the Centinela Valley Gem and Mineral Club, Hawthorne Memorial Center, El Segundo Blvd. and Prairie Avenue, Hawthorne, California.

OCTOBER 3 & 4, PROSPECTORS' CLUB OF SOUTHERN CALIFORNIA 3rd Annual Convention, Pioneertown, Calif., 4 miles north of Yucca Valley on State Route 62 in Riverside County. Public invited to watch or participate. Open Competition Metal Detector Contest, Ladies Only Detector Contest, Amateur Gold Panning Contest and activities for children. Write Jack Dorler, 2717 Normallin St., Torrance, Calif. 90505.

OCTOBER 3 & 4, TREASURE ISLES SHOW sponsored by the Long Beach Gem and Mineral Society, Wardlow Park Club House, 3457 Stanbridge, Long Beach. Many unusual displays including black opal and rare jade. Working lapidary booth and door prizes. Write Perry Griffith, 225 East 6th St., Long Beach, Calif. 90812.

The Trading Post Classified Ads

• BOOKS - MAGAZINES

DESERT MAGAZINES: 1937 Vol. 1 through Vol. 23—complete with binders; Vol. 24 through Vol. 30—no binders. Perfect copies, new condition. \$250.00 complete. C. R. Rees, 65 West 30th Ave., Eugene, Oregon 97405.

OUT-OF-PRINT books at lowest prices! You name it—we find it! Western Americana, desert and Indian books a specialty. Send us your wants. No obligation. International Bookfinders, Box 3003-D, Beverly Hills, Calif.

FOR SALE: Complete Desert Magazine, November 1937 to date. Also 1938, 1940 through 1948. Make offer. G. Bonardi, 3832 North 11th Ave., Phoenix, Arizona 85013. Phone (602) 265-9601.

WILD & WOOLLY WEST BOOKS: Indians, Ghost Towns, Old Trains, Prospecting, Mark Twain, Yukon Poems, etc. Send stamp for illustrated catalog, or \$1.00 for sample illustrated book on the Wild West. Filter Press, Box 5D, Palmer Lake, Colorado 80133.

"OVERLOOKED FORTUNES" in minerals and gem stones; here are a few of the 300 or more you may be overlooking: uranium, vanadium, tin, tungsten, columbium, tantalum, nickel, cobalt, gold, silver, platinum, iridium, beryllium, emeralds, etc. Some won't \$1 to \$2 a pound, others \$25 to \$200 per ounce; an emerald the size of your thumb may be worth \$1000 or more; learn how to find, identify and cash in on them. New simple system. Send for free copy "Overlooked Fortunes in Minerals," it may lead to knowledge which may make you rich! Duke's Research Laboratory, Box 666-B, Truth or Consequences New Mexico 87901.

LOST DESERT GOLD, legendary and geological history of the southern California desert, with photos and maps to pinpoint locations. \$2.50 postpaid. Gedco Publishing Co., Box 67, Bellflower, Calif. 90706.

"UPPER MOJAVE DESERT," first book to reveal route of extinct Tonopah-Tidewater Railroad, original names of present towns and cities, the Borax story, biographies of pioneers. Hardbound. Many priceless photos. Only \$4.95 postpaid from author: Mary O'Conley, Baker, Calif. 92309.

RIVER OF GOLD, the richest treasure of them all. A new book "Treasure Travels" contains all new photos, maps and other valuable information on California's most fabulous treasure. \$3 postpaid. Gedco Publishing Co., Box 67, Bellflower, Calif. 90706.

"GEMS & MINERALS," the monthly guide to gems, minerals, and rock hobby fun. \$4.50 year. Sample 25c. Gems & Minerals, Mentone, Calif. 92359.

SURVIVAL BOOKS! Guerrilla Warfare, Wilderness Living, Medical, Guns, Self Defense, Nature. Books—Vital, Fascinating, Extraordinary; Catalog free. Adobe Hacienda, Route 3, Box 517A, Glendale, Arizona 85301.

AMERICA BY CAR tells you what to see and where to go in every corner of the U.S. Lists scenic roads, important sights, best places to eat and stay. Discover this great country by car. #HP-20T-2—only \$2.95. Davis & Son, Dept. 7084 Midtown Station, Portsmouth, Virginia 23707.

GOLD HOBBY—the book for prospectors; plans for famous folding drywasher, test for unseen gold, some desert dangers to be aware of. Hard back, \$3.95 and 30c handling fee. P. O. Box 4195, Torrance, Calif. 90510.

• BOOKS - MAGAZINES

OLD BOTTLES PROFITABLE! "1200 Old Medicine Bottles" Bartholomew, prices current, descriptions, illustrated, \$3.95; "1001 Bitters Bottles", Bartholomew, PC, \$4.95; "Old American Bottles," Barber (1900) \$3.00; "American Bottles Old and New" Walbridge (1920) \$3.95; "Wonders of Glass and Bottle Making" Sauzay (1871) 236pp, 44 engravings, \$5.00; "Manufacturing and Bottling Carbonated Beverages" Tufts (c1885) \$3.50; "Hostettler's Almanac" (1883) \$1.95. Postpaid. Frontier Books, Fort Davis, Texas 79734.

"DEAD MEN DO Tell Tales" By Lake Erie Schaefer. Facts about Frank Fish's mysterious death, still unexplained. Sequel to "Buried Treasure & Lost Mines" the Treasure Hunters manual. \$3 postpaid. L. Erie Schaefer, 14728 Peyton Drive, Chino, Calif. 91710.

FREE 128 page catalog on detectors, books and maps. General Electronic Detection Co., 16238 Lakewood Blvd., Bellflower, Calif. 90706.

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• BUSINESS

GIFT SHOP. Owners contemplating retirement, would sell as a going concern. Indian and general souvenirs, located in center busy Southern Utah town. Particulars: Crichton, 341 S. 100 W., Cedar City, Utah 84720.

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1963 WILLYS JEEP—Good condition. Four cyl. Heater. Submit offer to Desert Magazine, Dept. CJ5 or phone 714 347-9214.

• GEMS

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★ Mail your copy and first-insertion remittance to: Trading Post, Desert Magazine, Palm Desert, California 92260. Classified rates are 25c per word, \$5 minimum per insertion.

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AUTHENTIC INDIAN jewelry, Navajo rugs, Chimayo blankets, squaw boots. Collector's items. Closed Tuesdays. Pow-Wow Indian Trading Post, 19967 Ventura Blvd., East Woodland Hills, Calif. Open Sundays.

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• MAPS

MAP FOR HIKERS and backpackers, California only. For free brochure, please write to John C. Stevenson, Box 1263, Chula Vista, California 92012.

"THE ROAD MAP TO California Pioneer Towns, Ghost Towns, and Mining Camps"—over 400 places with index classifying and describing town or site. Folded or rolled, \$2.95. "The Road Map to Lost Mines and Buried Treasures of California"—127 locations with text providing best available clues. Folded only. \$4.00. California residents add 5% sales tax. Both maps for \$6.50. Varna Enterprises, P. O. Box 2216, Dept. A, Van Nuys, Calif. 91404.

OVERVIEW OF MOJAVE Desert Map, new two color, 22x35 inch map on topo base. Features Ghost Towns, Mining Camps, Historic Trails and Routes, Abandoned Railroads, Indian Sites, Geology and Special Back Country to Explore. Price: \$3.00 folded, \$3.25 rolled. Desert Enterprises, Box 286-D, Ontario, Calif. 91764.

SECTIONIZED COUNTY maps — San Bernardino \$3; Riverside \$1; Imperial, small \$1, large \$2; San Diego \$1.25; Inyo \$2.50; Kern \$1.25, other California counties \$1.25 each. Nevada counties \$1 each. Include 5 percent sales tax. Topographic maps of all mapped western areas. Westwide Maps Co., 114 West Third Street, Los Angeles 13, California.

PROSPECTORS, ROCKHOUNDS, CAMPERS! Rand McNally Western Campground and Trailering Guide, \$1.95 plus 25c mailing charge. California residents add 5% sales tax. Mason Map Service, P. O. Box 781, San Gabriel, Calif. 91778.

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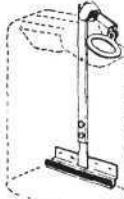
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Volcano is one of the few remaining communities of the Mother Lode Country that combines the history of the past with the activities of the present.

VOLCANO

Continued from page 32

windows. Suddenly the normal routine of the town was halted by a thunderous roar that vibrated down the street, breaking every uncovered piece of glass and sending it crashing to the ground. It was a dramatic lesson and had a lasting effect. Never again was "Old Abe's" ability to fire challenged!

The foregoing incident had historical importance. The Southern sympathizers were a well organized branch of the Knights of the Golden Circle, a nationwide organization rumored to have been over 16,000 strong in the Mother Lode country. Had their attempt to take over Volcano been successful, it would have served as a signal for similar uprisings throughout California, possibly changing the outcome of the Civil War.

Another point of historical interest as far as "Old Abe" is concerned, is the fact that it was cast in 1837 at South Boston by the Cyrus Alger Foundry. After 1861, all six-pounders were melted down to make the twelve-pounder "Napoleon" used by the North. Being west of the Mississippi, "Old Abe" escaped this fate and just might be the only six-pounder in existence.

For years the old cannon was forgotten and sat around gathering dust. Then in

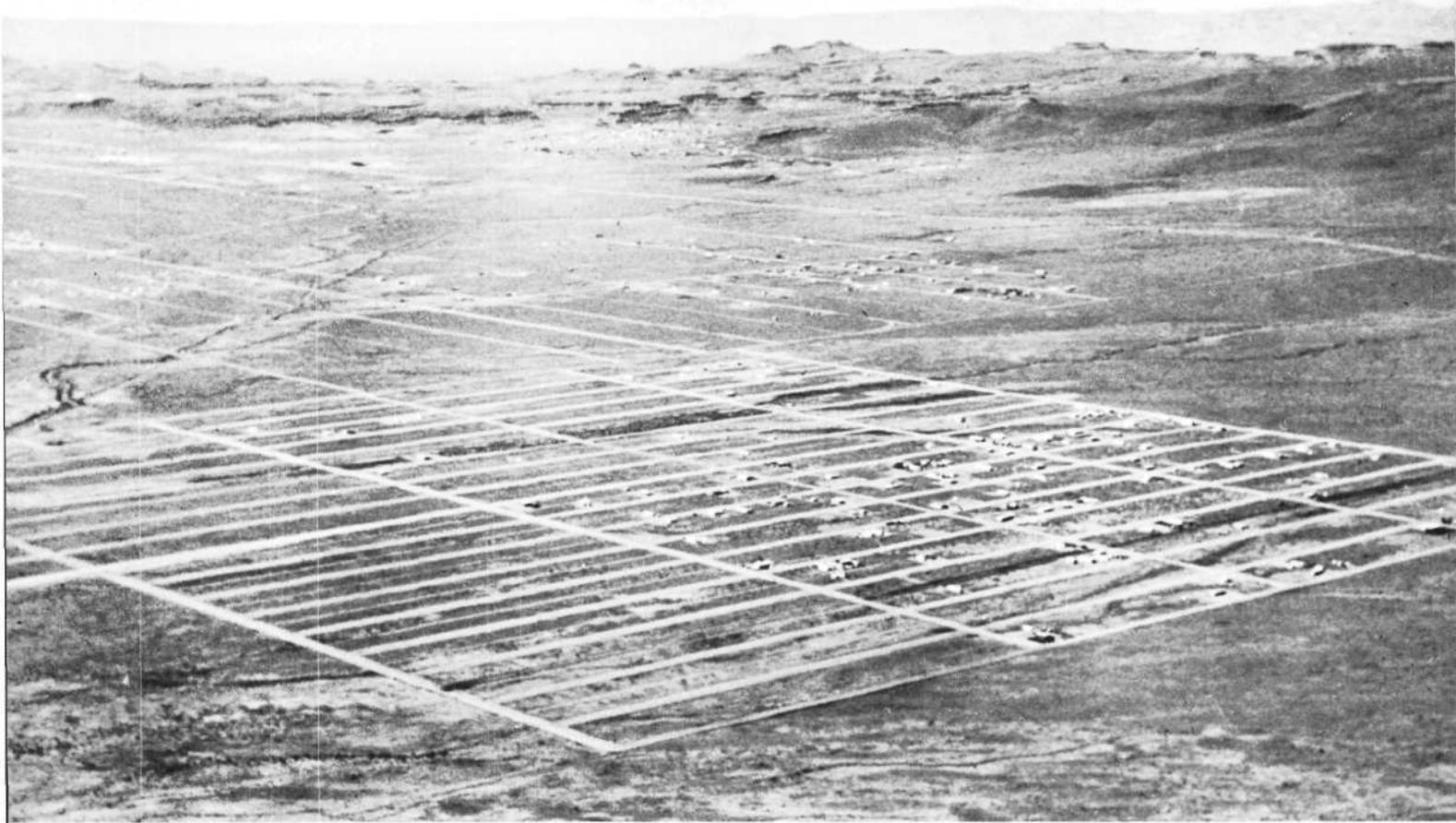
1922, it was sent to Sacramento to be displayed in the Sutters Fort Museum. For the next nine years a controversy that almost exploded into another war was waged over the point of was the cannon a permanent gift, or had it just been loaned to the Museum? It took the Governor of California to settle the matter, and in 1931 he signed the official order giving the old field piece back to the citizens of Volcano. On June 12, 1932, a shelter was dedicated and "Old Abe" was home for good.

Today, Volcano's small population convey a genuine feeling of hospitality, where trust and friendliness is the rule rather than the exception. There is a sense of belonging, whether it is your first visit, or your twenty-first. More important than the picturesque old landmarks, Volcano provides an atmosphere that enables us to reflect back upon the saga of western man and recall with pride the heritage that is ours.

We have come a long way, but as an old-timer once replied when asked what he thought of the progress this country has made, "Ya, it's big and beautiful all right, and I helped build it. But, by God, wouldn't it be fun to tear it all down, and start over again!" □

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LAKE CAMANCHE NORTH SHORE

AND

LAKE CAMANCHE VILLAGE



SEE PAGE 37